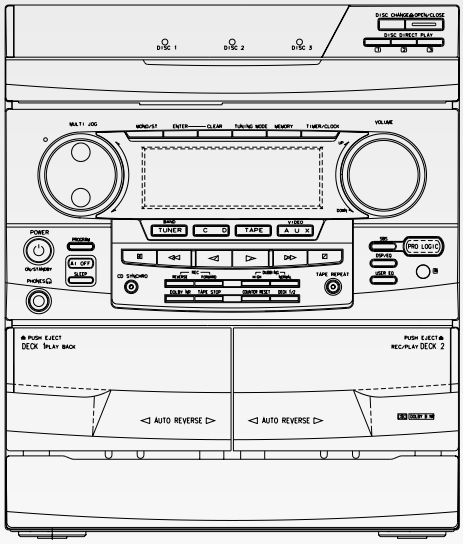
# 3 CD CHANGER
# MINI MINI COMPONENT
## MAX-632P

# SERVICE Manual

3CD CHANGER MINI COMPONENT



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# 2. Product Specfications

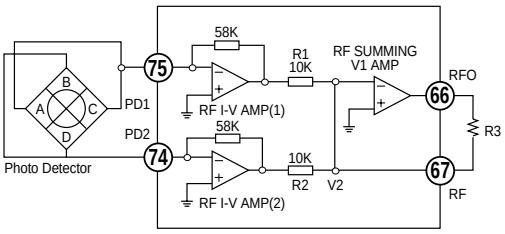
| | | | |
|---|---|---|---|
| General | | Power source<br>Power consumption<br>Dimensions (mm) | 230V 50HZ (option)<br>300W<br>270(W) x 317(H) x 333(D) |
| Amp | | Power output (Front)<br>(Center)<br>(Rear)<br>Total harmonic distortion<br>Frequency range<br>Signal to noise ratio<br>Channel separation<br>Input sensitivity | 50W / Ch(6Ω) (THD 1%)<br>20W(8Ω) (THD 1%)<br>10W / Ch(16Ω) (THD 1%)<br>0.08%<br>20Hz ~ 20kHz<br>75 dB<br>50 dB<br>400mV |
| Tuner | FM | Frequency range<br>Usable sensitivity<br>Signal to noise ratio<br>IF rejection ratio<br>Total harmonic distoration<br>Separation (Stereo) | 87.5 ~ 108MHz<br>8µV<br>62 dB<br>60 dB<br>0.45%<br>35 dB |
| | MW<br>(AM) | Frequency range<br>Usable sensitivity<br>Signal to noise ratio<br>IF rejection ratio<br>Total harmonic distortion | 522 ~ 1611KHz<br>600µV<br>40 dB<br>30 dB<br>2% |
| | LW<br>(option) | Frequency range<br>Usable sensitivity<br>Signal to noise ratio | 146 ~ 290KHz<br>1000µV<br>35 dB |
| Cassette | | Frequency range<br>WOW FLUTTER<br>Erasing effect<br>Signal to noise ratio<br>Total harmonic distortion | 125Hz ~ 12.5KHz<br>0.15%<br>60 dB<br>40 dB<br>2.5% |
| Compact Disc | | Frequency response<br>Signal to noise ratio<br>Channel separation<br>Total harmonic distortion | 20Hz ~ 20KHz(±1dB)<br>90 dB(1kHz 0dB)<br>75 dB(1kHz 0dB)<br>0.08%(1kHz 0dB) |

Specifications are subject to change without notice.

# 5. Special Circuit Descriptions

## 5-1 CD

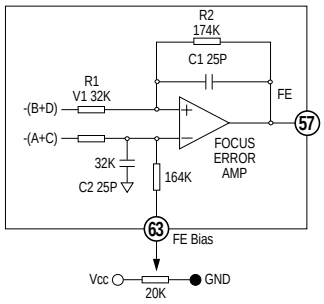
### 5-1-1 RF Amp (KA9220) : WIC01




RF I-V Amp(I-1) and RF I-V Amp (I-2) are converted to voltage (via internal resistance of 58kΩ) from the current of PD1 (A+C) and PD2 (B+D):
These voltages are added by the RF summing amplifier.
The signal (A+B+C+D) is applied to RFO (No.2 terminal)
RF output voltage is calculated as follows :

$$V_{RF} = -R3 \times (iPD1 + iPD2)$$
$$= -R3 \times (V_1/R_1 + V_2/R_2)$$
$$= -R3 \times \left(\frac{V1}{10K} + \frac{V2}{10K}\right)$$
$$= \frac{R3}{10K} \times (V_1 + V_2)$$

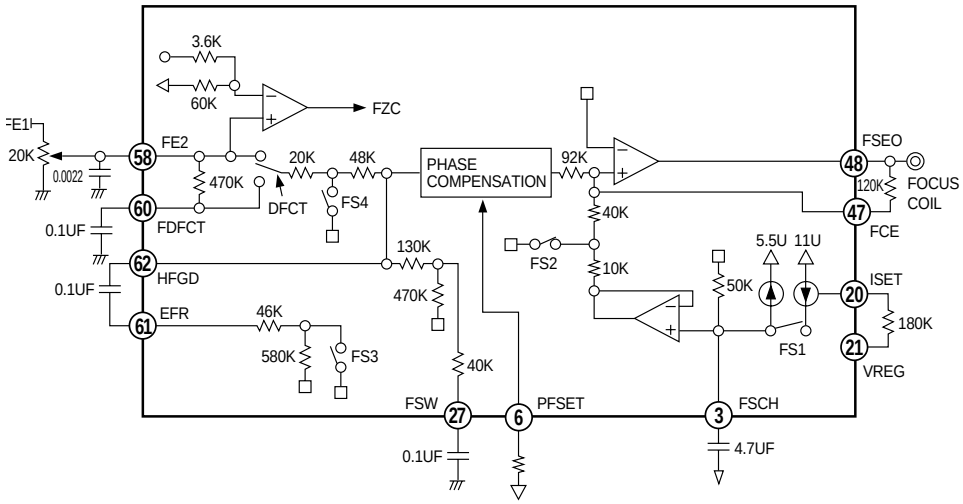
### 5-1-2 Focus Error Amp (KA9220) : WIC01




FOCUS ERROR Amp AMPLIFIES the difference between RF I-V Amp (1) output (A+C) and RF I-V Amp (2) output (B+D) These two signals are supplied to (-) and (+) input terminals of the FOCUS ERROR Amp. The FOCUS ERROR signal resulting from this difference voltage is applied to FE (Terminal No. 57).
The FE output voltage of this low frequency component varies according to {(A+C) - (B+D)}.
VFE is calculated as follows:
VFE=(R2/R1) X (V2-V1) = 5.4(V2-V1)
This FOCUS ERROR voltage is sent to FOCUS SERVO.

### 5-1-3 Focus Servo System (KA9220) : WIC01

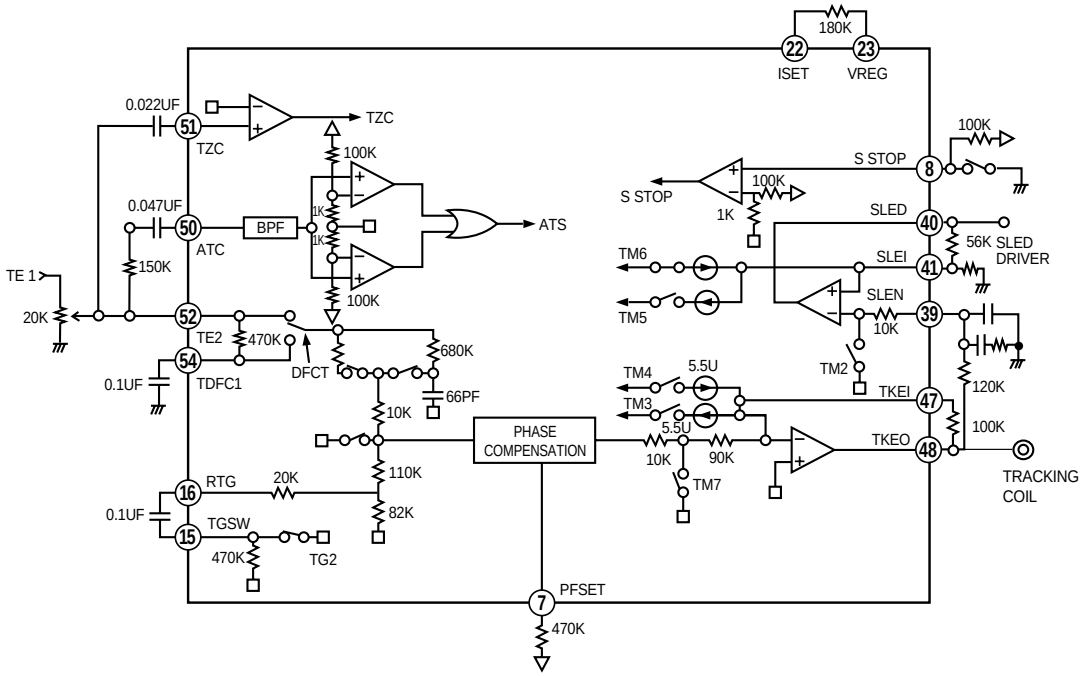
When FS3 is ON, high-frequency gain decreases (time constant is set by pin17, pin19, and capacitor connected to internal resistance). The capacitor between pin18 and GND sets the time constant to pass low freqencies in PLAY mode.




The maximum frequency of focus phase compensation is inversely proportional to the resistance connected to pin 7. Focus search peak is about 1.1 Vp-p, and is inversely proportional to the resistance connected to pins 22,23 (if this resistance changes, the peak of track jump and sled kick change). The inversion input of FZC comparator is set to 5.7% of the difference between Vcc and VC (pin69) {(5.7% x (Vcc-Vc)}.
Note : If the resistance connected to pin 7 changes, the phase compensation peak of focus,tracking,sled servos change. At the same time, 'op-amp' dynamic range and offset voltage also change.

## 5-1-4 Tracking Sled Servo System (KA9220) : WIC01

The capacitor between pins 15 and 16 attenuates high frequencies when TG2 is off. The maximum frequency of tracking phase compensation is inversely proportional to the resistance connected to pin 7 (about 1.2kHz at 470k). The tracking jump (FWD and REV) is determined when TM3 and TM4 are ON, and the peak voltage induced from tracking coil is decided by both TM3 and TM4 current values and feedback resistance of pin 47.
Tracking jump max voltage = TM3 (TM4) current x feedback reisistance.




FWD or REV sled kick occurs when TM5 or TM6 is ON, and the peak voltage added to sled motor is decided by TM5 or TM6 current and the feedbadk resistance of pin 41.
Sled jump max voltage= TM5 (TM6) current x feedback resistance
Each SW current is decided by the resistance connected to pin 22 and 23.
When the resistance is about 150Ω,

TM3 or TM4 = 11$\mu$A,
TM5 or TM6 = 22$\mu$A,

This current is inversely proportional to the resistor, variable within a range of 5 to 40$\mu$A for TM3.
STOP is the ON/OFF detection signal for the limit SW (or the sled motor's innermost cirumference).

# 3. Disassembly and Reassembly

## 3-1 Cabinet-Top

1. Remove 9 screws holding the Cabinet-Top.
2. Lift the back of the Cabinet-Top and slide it to the rear to remove.

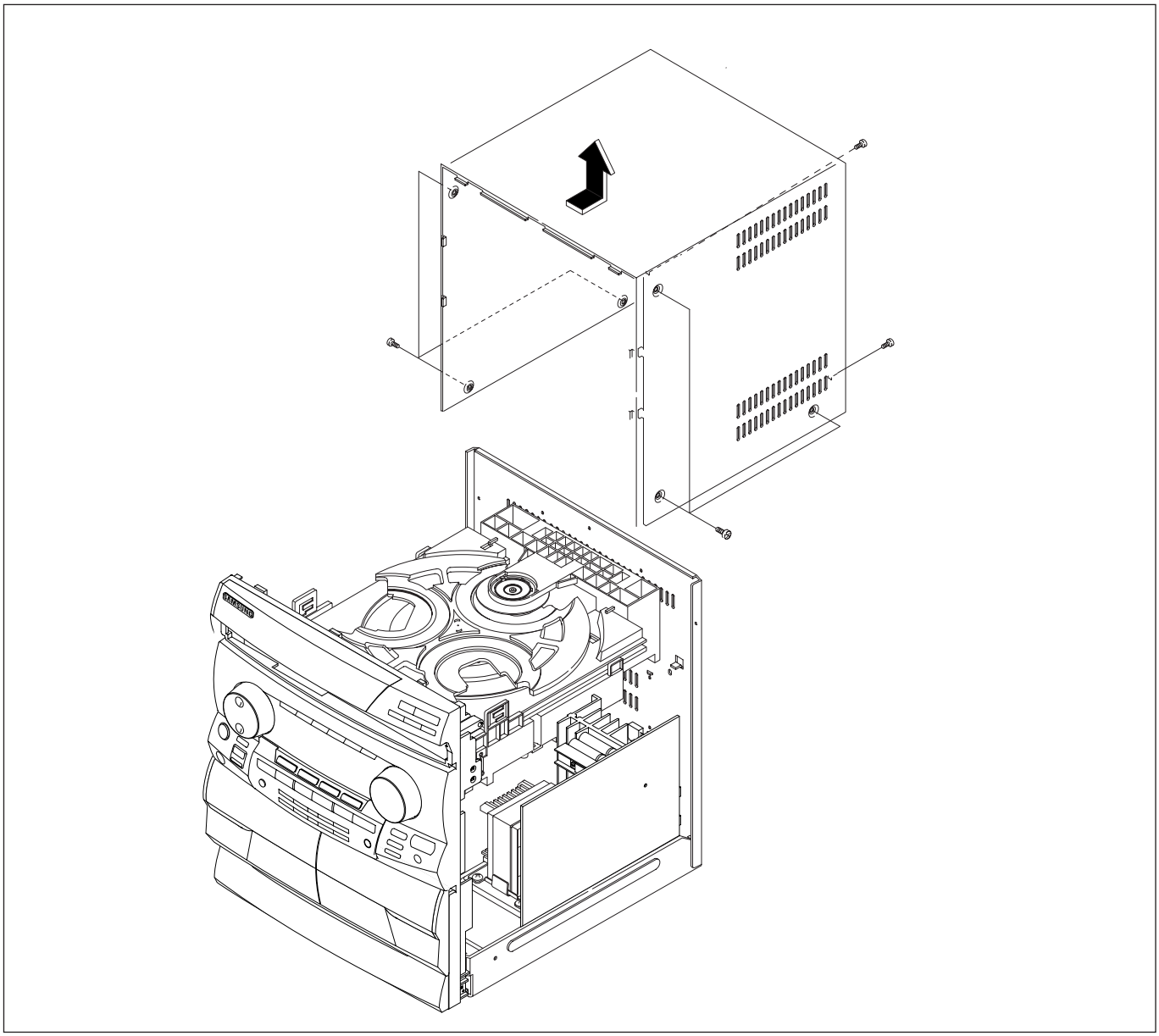


Figure 3-1

## 3-2 CD-Mecha, Door-CD

1. After power is connected :
   - Turn power on
   - Open the tray using the open/close key
2. After power is not connected :
   - Turn the Gear clockwise using the hand as shown in figure 3-2-1.
   - Pull the Tray in the direction of arrow ②.
3. Remove 4 screws ④,⑤ and lift the CD-Mecha.

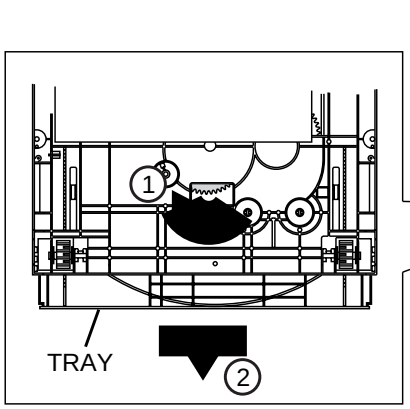



Figure 3-2-1

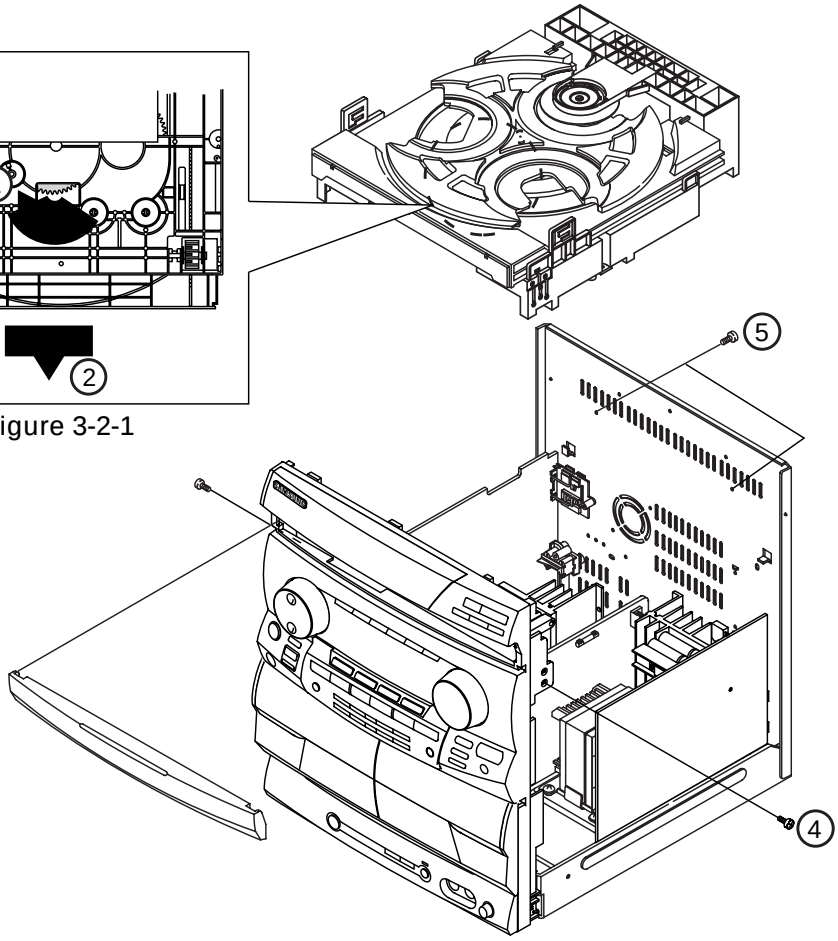



Figure 3-2

## 3-3 Cabinet-Rear and Main PCB

1. Remove 17 screws ⑤ and then lift the Cabinet-Rear ⑥ and slide it to rear to remove (see arrow).
2. Remove the Main-PCB ⑦.

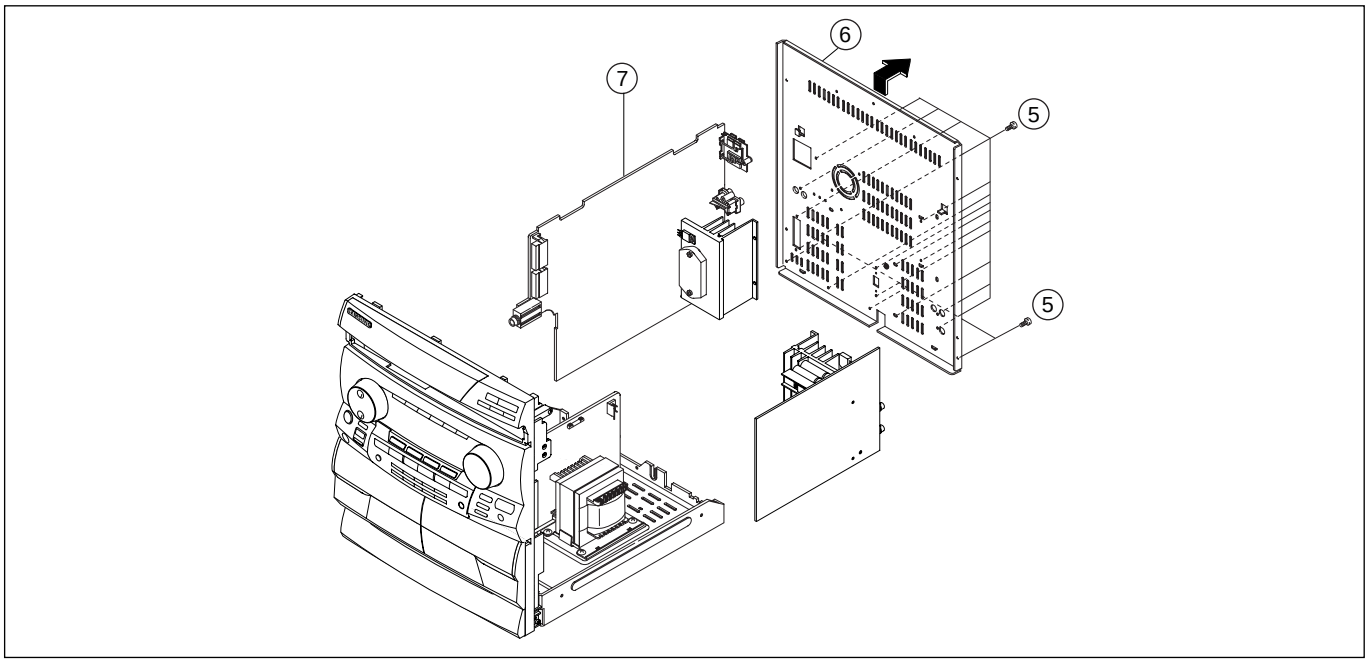



Figure 3-3

## 3-4 Cabinet-Front and Cabinet-Bottom

1. Remove 5 screws ⑧.
2. Remove the Cabinet-Rear by pushing the "A" and "B" as shown.

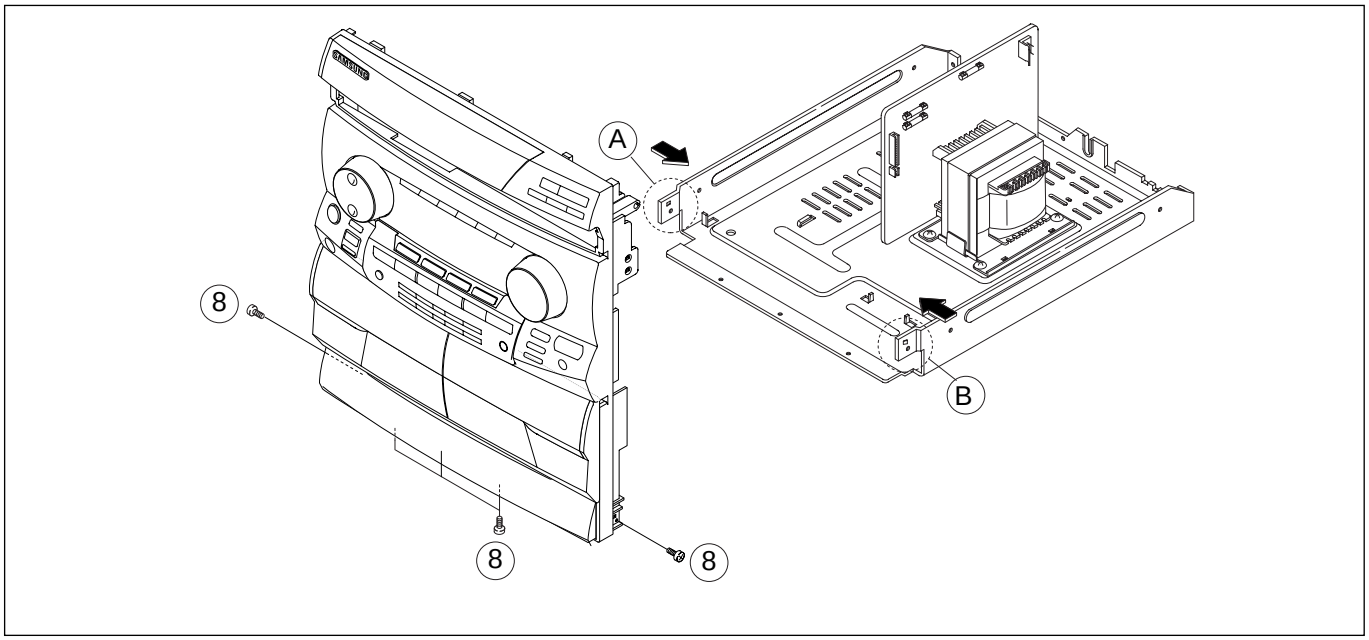



Figure 3-4

# 3-5 CD Mecha

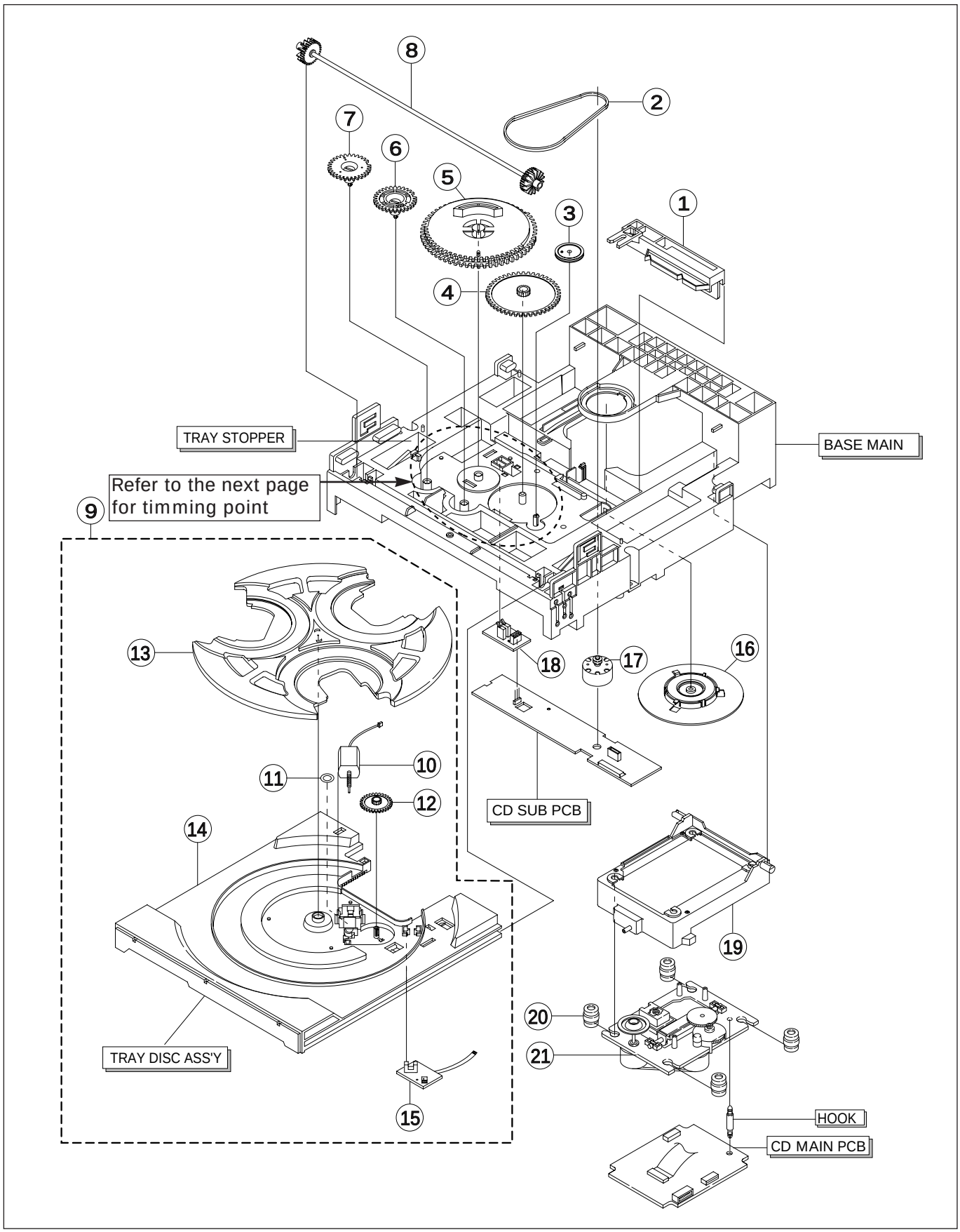



Figure 3-5

## 3-5 CD Mecha Continued

*When removing, take extreme care not to damage the hook.
1. Open the Tray Disc Ass'y by turning the Gear-Load(⑤) in the direction of open,then remove the Wire-Tray(㉕).
2. Remove two Tray-Stopper and tray.

### 3-5-1 Tray Disassembly

1. Remove the Tray-Roulette(⑬) from the Tray-Disc Ass'y(⑭) by releasing the hook.
2. Remove the PCB-Sensor Ass'y(⑮) from the tray by releasing the hook.
3. Remove the Worm-Motor Ass'y(⑩)from the Tray-Disc Ass'y(⑭).
4. Remove the Cushion-Motor(⑪) from the Tray.
5. Remove the Gear-Roulette(⑫) from the Tray-Disc Ass'y(⑭) by releasing the hook.

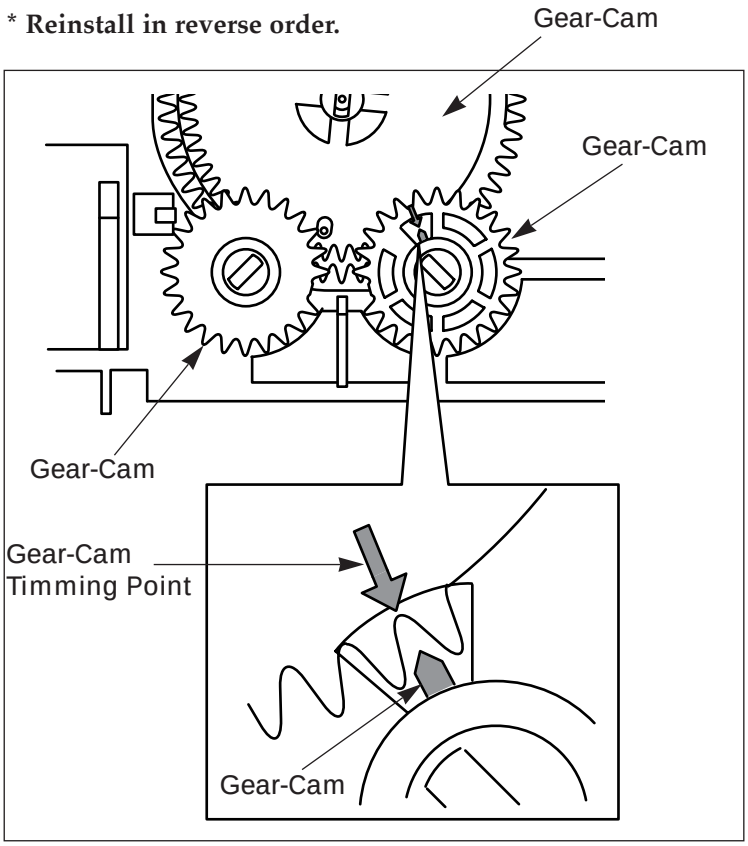
### 3-5-2 Main Disassembly

1. Remove the Table-Chuck Ass'y(⑯) from the Base-Main by turning it.
2. Push the Slider-Cam(①)towards right, then lift it up to remove.
3. Remove the Gear-Tray(⑥) from the Base-Main by releasing the fixed hook.
4. Remove the Gear-Converter(⑦)from the Base-Main by releasing the fixed hook.
5. Remove the Gear-Cam(⑤) from the Base-Main by releasing the fixed hook.
6. Remove the Belt(②) from the Pulley-Motor Ass'y(⑰) & the Gear-Pulley(③).
7. Remove the Gear-Pulley(③) from the Base-Main by releasing the fixed hook.
8. Remove the Gear-Load(④).
9. Remove the Gear-Synchro(⑧).
10. Desolder two soldering points of the CD SUB PCB, then remove it from Base-Main by releasing the hook.
11. Remove the Pulley-Motor Ass'y(⑰) by releasing the hook.
12. Remove the PCB-SW Ass'y(⑱) by releasing the hook.

### 3-5-3 CD Main PCB Disassembly

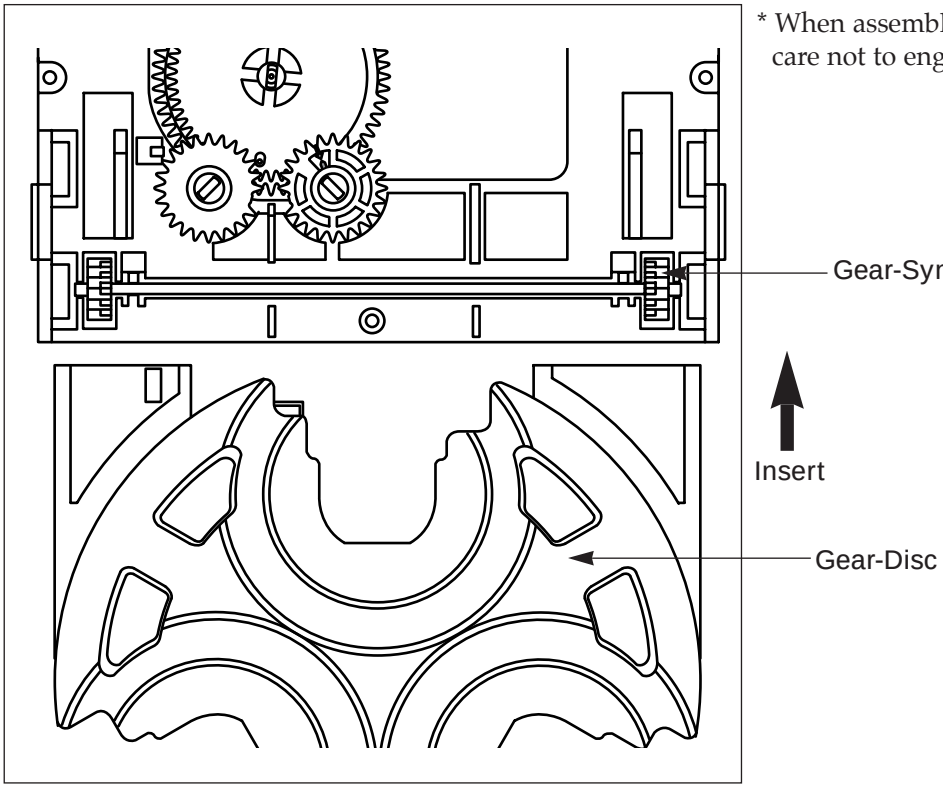
1. Remove the Lever-Lifter(⑲) from the Base-Main by releasing two hooks.
2. Remove four Rubber-CD(⑳) from the Lever-Lifter and then remove the Deck-CD(㉑).
3. Remove the Hook.
4. Remove the CD MAIN PCB with the soldering iron.

*** Reinstall in reverse order.**




* Align the Gear-Cam with the Gear-Tray as shown ing Figure 3-6, then mount the Tray-Disc.

Figure 3-6




* When assembling the Tray-Disc,take extreme care not to engage with Gear-Synchro.

Figure 3-7

## 3-6 CD Deck

1. Remove the Shaft ①.
2. Lift the P/U ②.
   Note : Take extreme care not to touch the surface of lens.
3. Lift the Center-ring ③.
4. Remove the Spring-T/Table ④.
5. Remove the Turn-Table (M) ⑤.
6. Remove 2 screws ⑥ and then remove the Spindle-Motor ⑦.
7. Remove the Cover-Gear ⑧ by pushing the hook.
8. Remove the Gear (c) ⑨ by pushing the hook.
9. Lift the Gear(b) ⑩.
10. Remove the Gear(a) ⑪.
11. Remove 2 screws ⑫ and the then remove the Feed-Motor ⑬.
12. Remove the Chassis-Deck (M) ⑭.

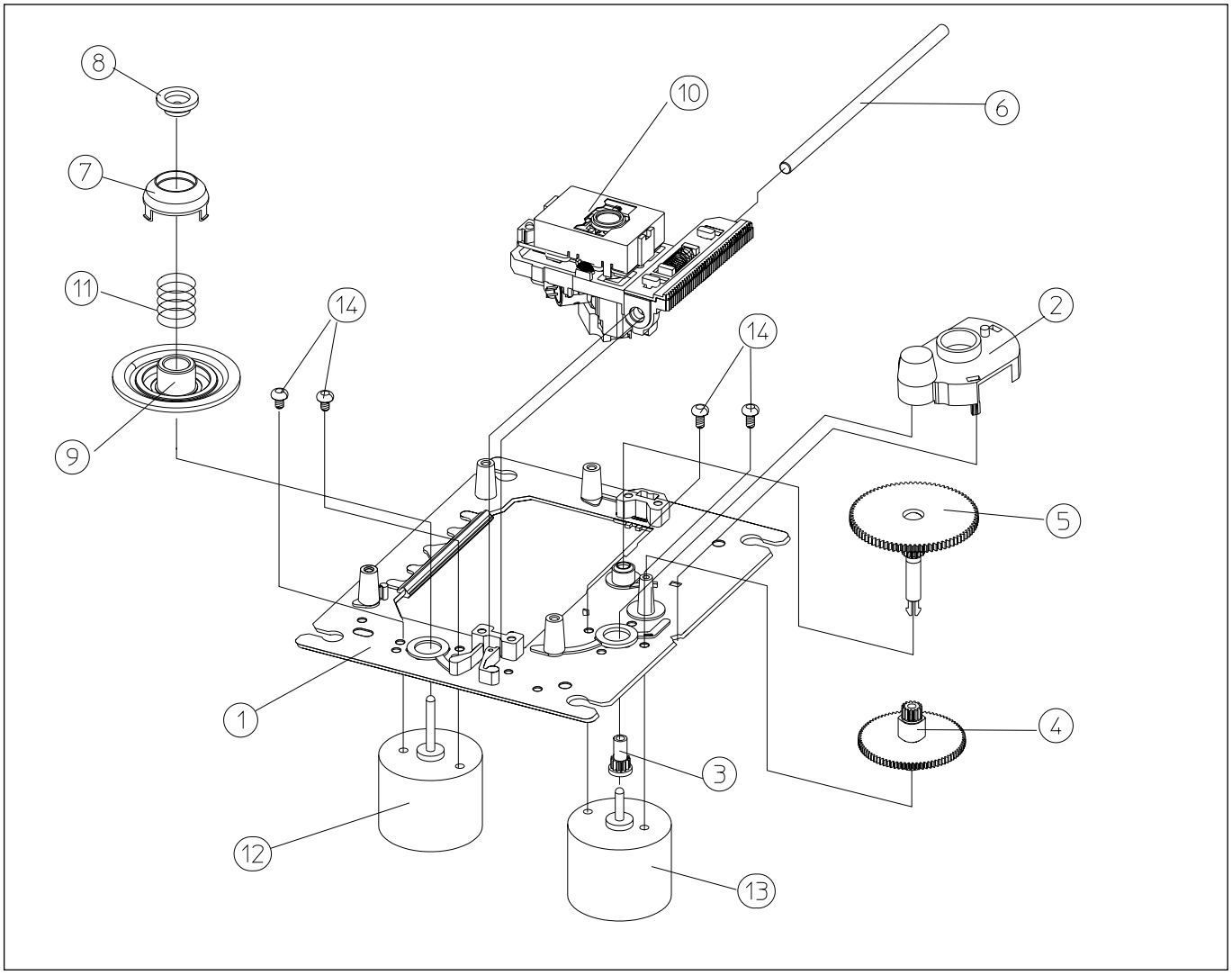
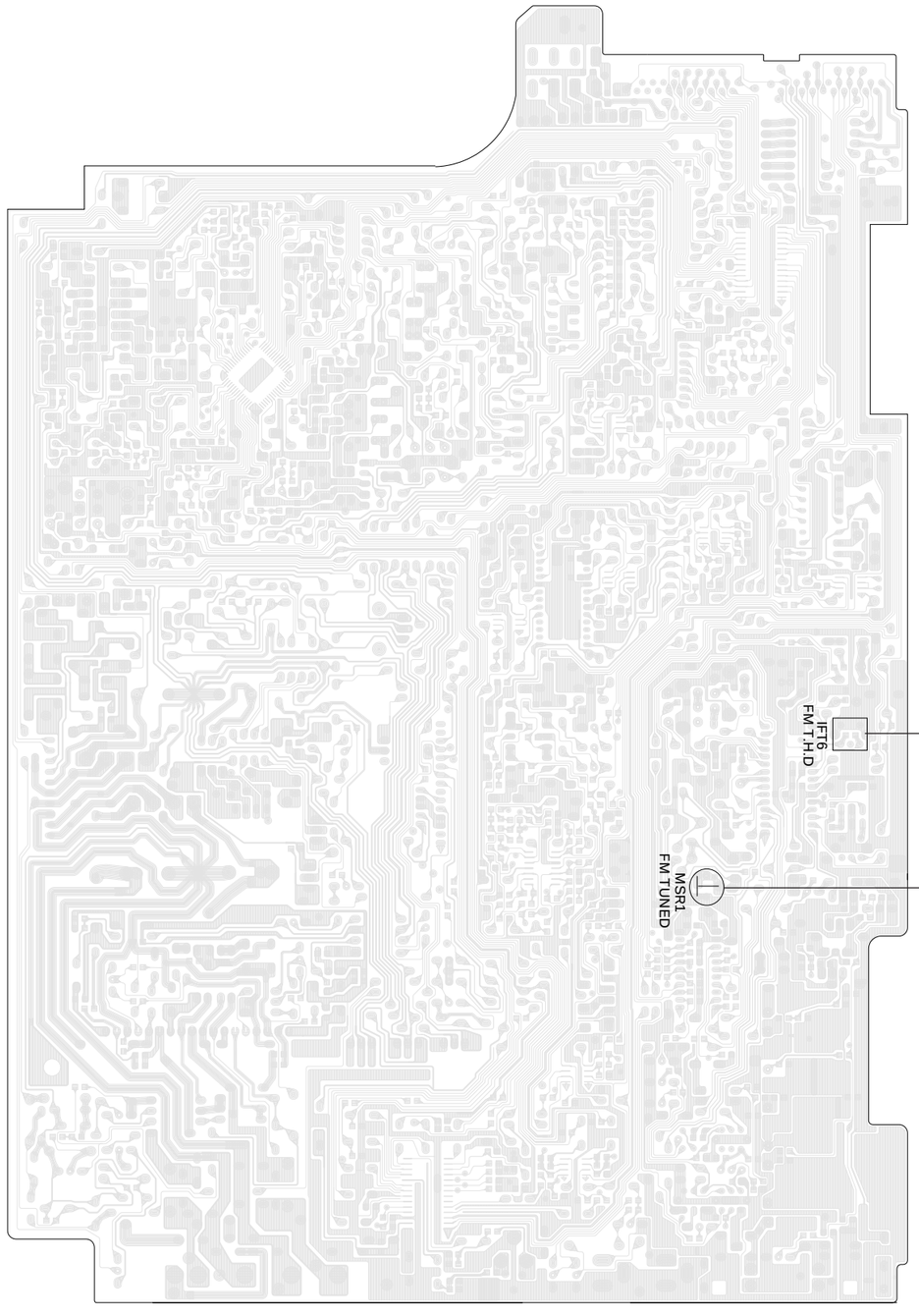



Figure 3-8

## 4-1 Tuner




| FM THD Adjustment | |
|---|---|
| SSG FREQ. | 98 MHz |
| Adjustment point (IFT6) | FM DETECTOR COIL |
| Minumum Distortion (Figure 4-1) | |

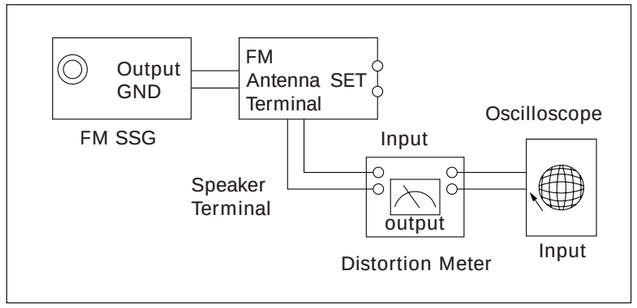



Figure4-1 IF CENTER and THD Adjustment

| FM Search Level Adjustment | |
|---|---|
| SSG FREQ. | 98 MHz |
| Adjustment point (MSR1) | SEMI-VR(5KB) |
| “TUNED” is shown on FLT (Figure 4-2) | |

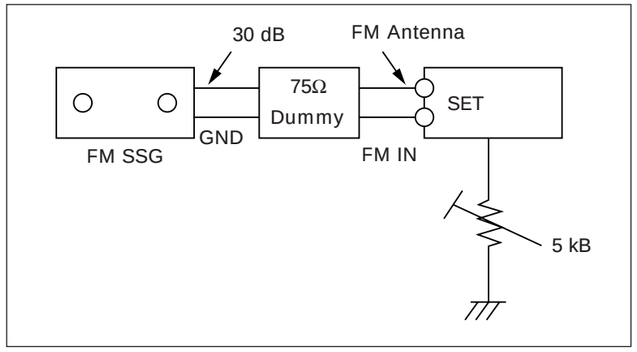



Figure4-2 FM Auto Search Level Adjustment

# 4-2 Cassette Deck

## 4-2-1 To Adjust Tape Speed

**Notes**

1) Measuring tape: i) MTT-111 (or equivalent)
(Tapes recorded with 3kHz)
ii) MTT-5512 (or equivalent)
2) Connect the cassette deck to the frequency counter as in figure 4-3.

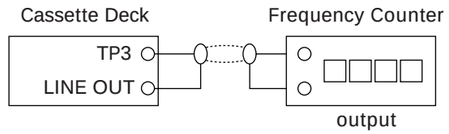



Figure 4-3

| Step | Item | Pre-Setup Condition | Pre-Setup | To Adjust | Standard | Remark |
|---|---|---|---|---|---|---|
| 1 | NOR SPEED Control | OUT (connected to the frequency counter) | 1) 1-Deck:MTT-111<br>2) Press PLAY SW button<br>3) 2-Deck:Same as below | Turn DSR5 to left and right | 3KHz ±1% | |
| 2 | HI SPEED Control | Same as above | 1) 1-Deck:MTT-111<br>2) 2-Deck:MTT-5512<br>3) Press Hi Speed dubbing SW button | Fixed | 5700 ~ 6300KHZ | Check |

## 4-2-2 To Adjust Replay Head

**Notes**

1) Before the actual adjustment, clean the replay/recording head.
2) Measuring tape :
i) MTT-114NA(or equivalent 12.5kHz AZIMUTH control)
ii) MTT-150(or equivalent : Dolby level 200nwb/m)
3) Dolby NR SW OFF
4) The cassette deck is connections as shown in figure 4-5.

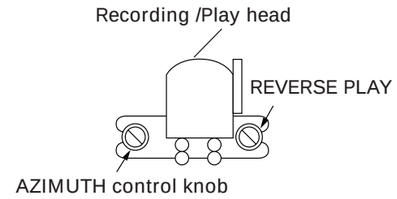



Figure 4-4

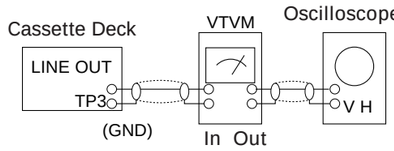



Figure 4-5

### ① Adjust 1-Deck Replay Level

| Step | Item | Pre-Setup Condition | Pre-Setup | To Adjust | Standard | Remark |
|---|---|---|---|---|---|---|
| 1 | AZIMUTH | TP3 OUT (VTVM is connected to the scope) | After putting MTT-114NA into Deck 1<br>1) Press FWD PLAY button.<br>2) Press REV PLAY button. | 1) Turn the control knob to as shown in Figure4-4.<br>2) Adjust the right control screw to playback REV. Mode | Max output and same phase (both channels) | After adjustment secure it with REGION LOCK. |
| 2 | PlayBack out Level | Same as above | PLAY MTT-150 on Deck 1. | L-CH:Turn DSR3L to the right and left<br>R-CH:Fixed | 100mV ±0.5dB | See the diagram for adjustment locations. |

### ② Adjust 2-Deck Replay Level

| Step | Item | Pre-Setup Condition | Pre-Setup | To Adjust | Standard | Remark |
|---|---|---|---|---|---|---|
| 1 | AZIMUTH | TP3 OUT (VTVM is connected to the scope) | After putting MTT-114NA into Deck 2<br>1)Press FWD PLAY button.<br>2)Press REV PLAY button. | 1) Turn the control knob to as shown in Figure4-4.<br>2)Adjust the right control screw to playback REV. Mode | Max output and same phase (both channels) | After adjustment secure it with REGION LOCK. |
| 2 | PlayBack out Level | Same as above | PLAY MTT-150 on Deck 2. | L-CH:Turn DSR4L to the right and left<br>R-CH:Fixed | 100mV ±0.5dB | See the diagram for adjustment locations. |

## 4-2-3 To Adjust PlayBack

NOTES

1) Connect the measuring instruments as shown in Figure 4-6.
2) Set the DOLBY NR Switch off.
3) Measuring tape:
   MTT-5512 (or equivalent: normal recording)
4) The input signals supply 400Hz 400mV into AUX IN of AMP (AUDIO OSC.)

| Step | Item | Pre-Setup Condition | Pre-Setup | To Adjust | Standard | Remark |
|---|---|---|---|---|---|---|
| 1 | Normal electric current for recording | Connect to TP2 as in Figure4-6 and read VTVM | Insert MTT-5512 into Deck2, then press REC button. | L-CH : DSR2L to the right and left.<br>R-CH : Fixed | VTVM 400mV ±5% | See diagram for adjustment locations |
| 2 | BIAS OSC. Frequency | Connect the frequency counter to TP | Insert MTT-5512 into Deck2, then press REC button. | Turn BIAS oscillator frequency coil (LL3) to the right and left. | 105KHz ±5% | See diagram for adjustment locations |
| 3 | BIAS Electric current | Connect to TP1 as in Figure 4-6 and read the VTVM | Insert MTT-5512 into Deck2, then press REC button. | L-CH: DSR1L and R-CH: DSR1R to the right and left | VTVM (7V ±5%) | See diagram for adjustment locations |

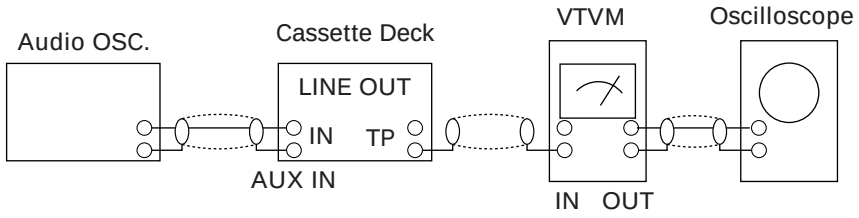
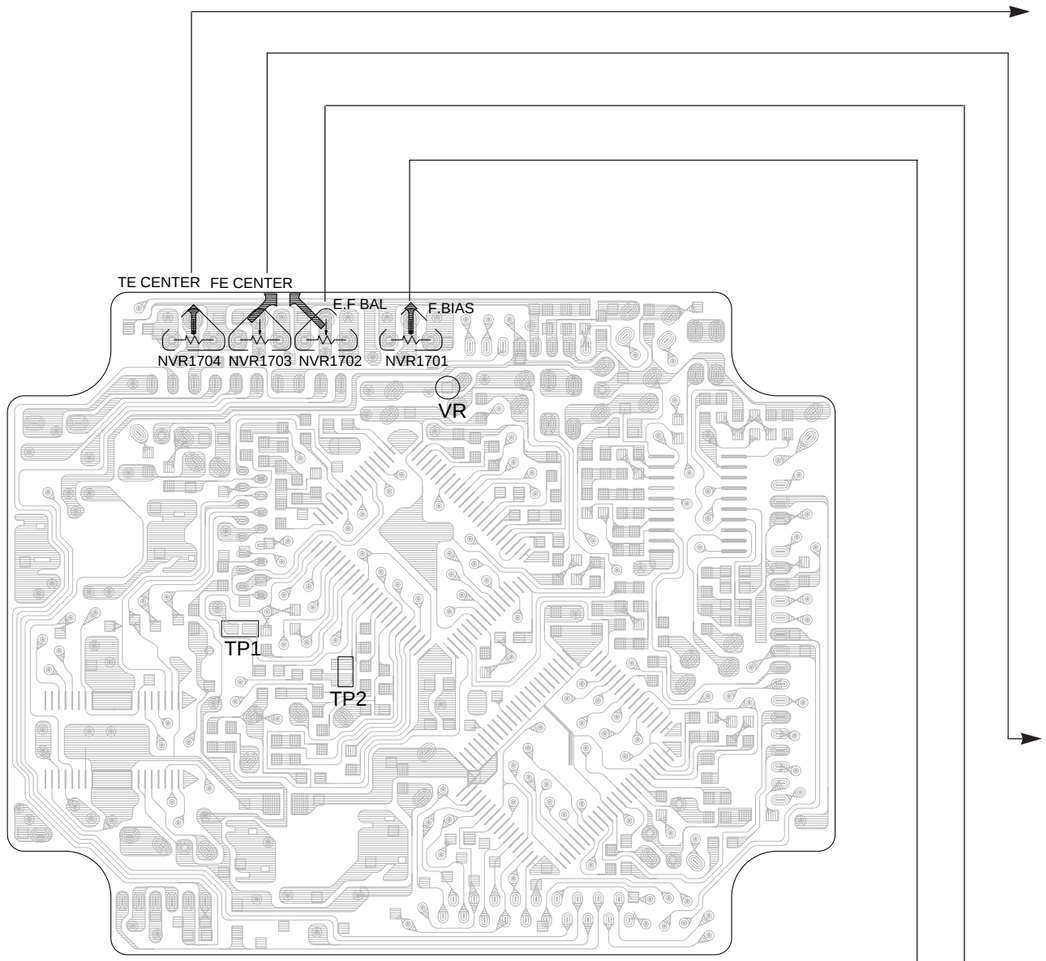



Figure 4-6

# 4-3 CD



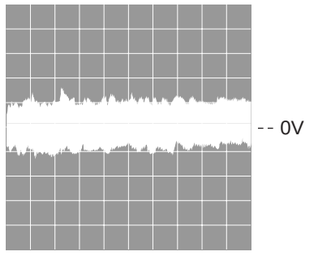

## 4-3-1 To Adjust FOCUS BIAS (STOP mode)

1. Set Volt/Div of the oscilloscope to DC 100mV.
2. Ground the scope input and set the waveform to 0v, DC range.
3. Connect the GND terminal of the oscilloscope to Vref, and (+) terminal to center of AP1.
4. Set NVR1704 to 0mV.

## 4-3-2 To Adjust Tracking Gain (PLAY mode)

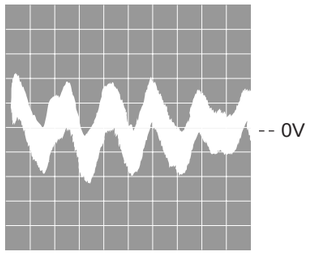
1. Connect the ground terminal of the oscilloscope to Vref and (+) terminal to TP2.
2. Load and play the disc.
3. While the disc is running adjust the gain with NVR1701 as shown below.

Normal Frequency



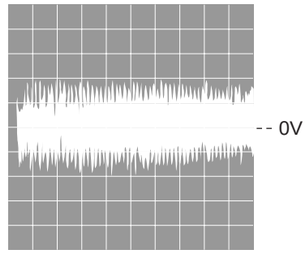

VOLT/DIV : 0.2V
TIME/DIV : 2mS

Low Frequency




VOLT/DIV : 0.2V
TIME/DIV : 2mS

High Frequency

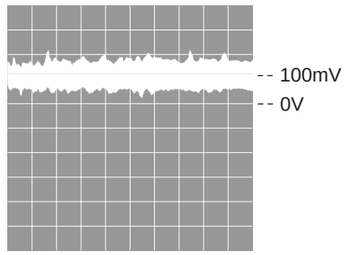



VOLT/DIV : 0.2V
TIME/DIV : 2mS

## 4-3-3 To Adjust Focus Gain (PLAY mode)

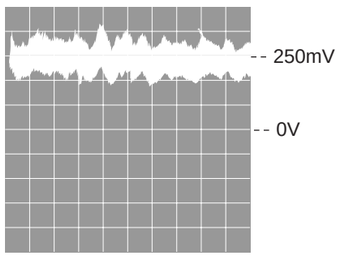
1. Connect the ground terminal of the oscilloscope to Vref and (+) terminal to TP1.
2. Load and play the disc.
3. While the disc is running adjust the gain with NVR1702 as shown in the following figure.

Normal Frequency



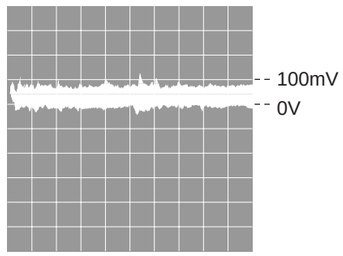

VOLT/DIV : 0.1V
TIME/DIV : 2mS

Low Frequency




VOLT/DIV : 0.1V
TIME/DIV : 2mS

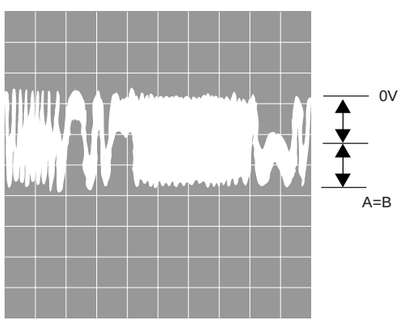
High Frequency




VOLT/DIV : 0.1V
TIME/DIV : 2mS

## 4-3-4 To Adjust E/F Balance (PLAY mode)

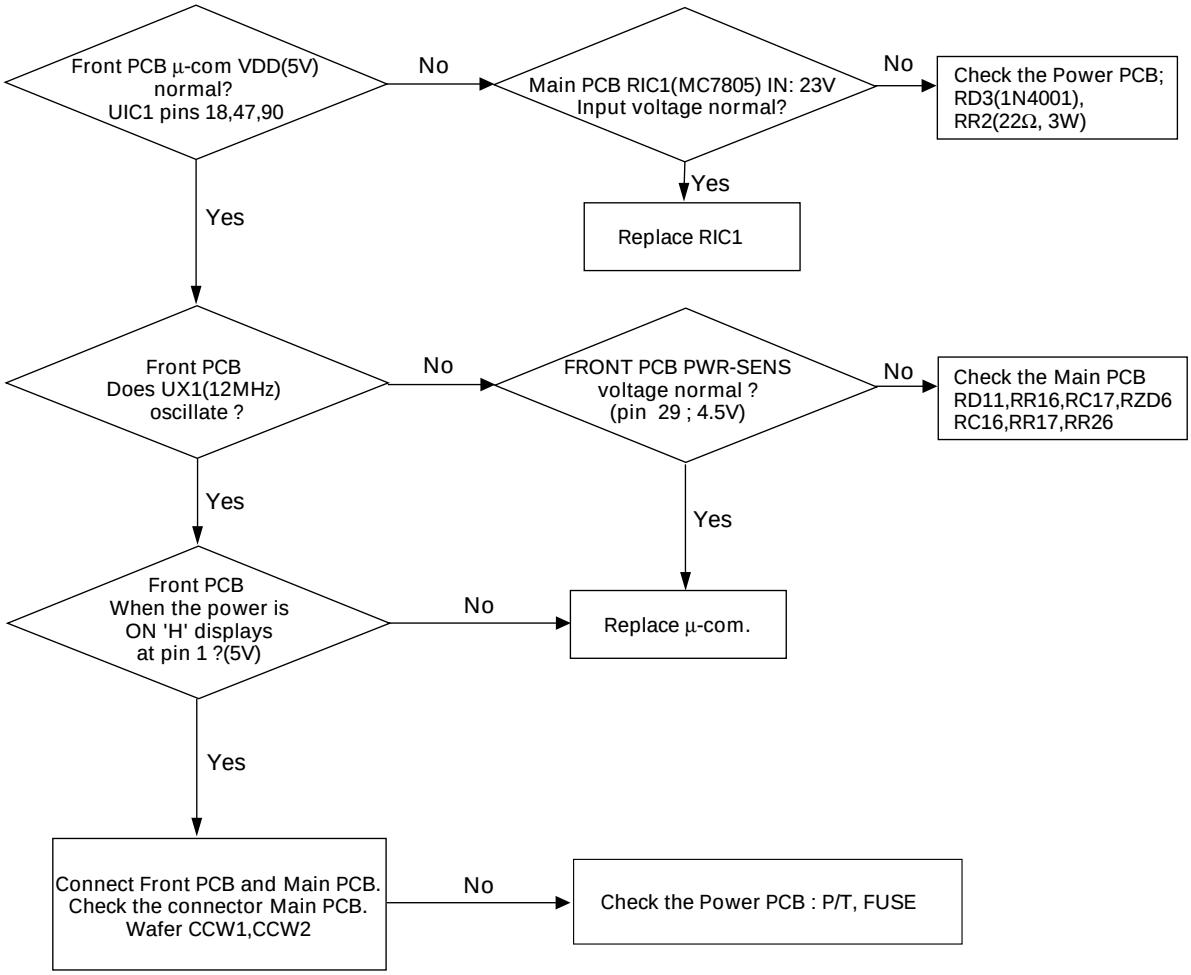
1. Set Time/Div of the oscilloscope to 2mS.
2. Set Volt/Div of the oscilloscope to 0.5V.
3. Ground the scope input and set to DC, and then set the DC range.
4. Connect the ground terminal of the oscilloscope to Vref and (+)terminal to TP2.
5. Load and play the disc.
6. Turn NVR1701 counterclockwise to the minimum value.
7. Raise NVR1703 and adjust the waveform so that its middle comes to ground of the oscilloscope. (Or, until the upper half of waveform becomes symmetrical to the bottom half,A=B)
8. Adjust NVR1701 (arrow) for normal sound.



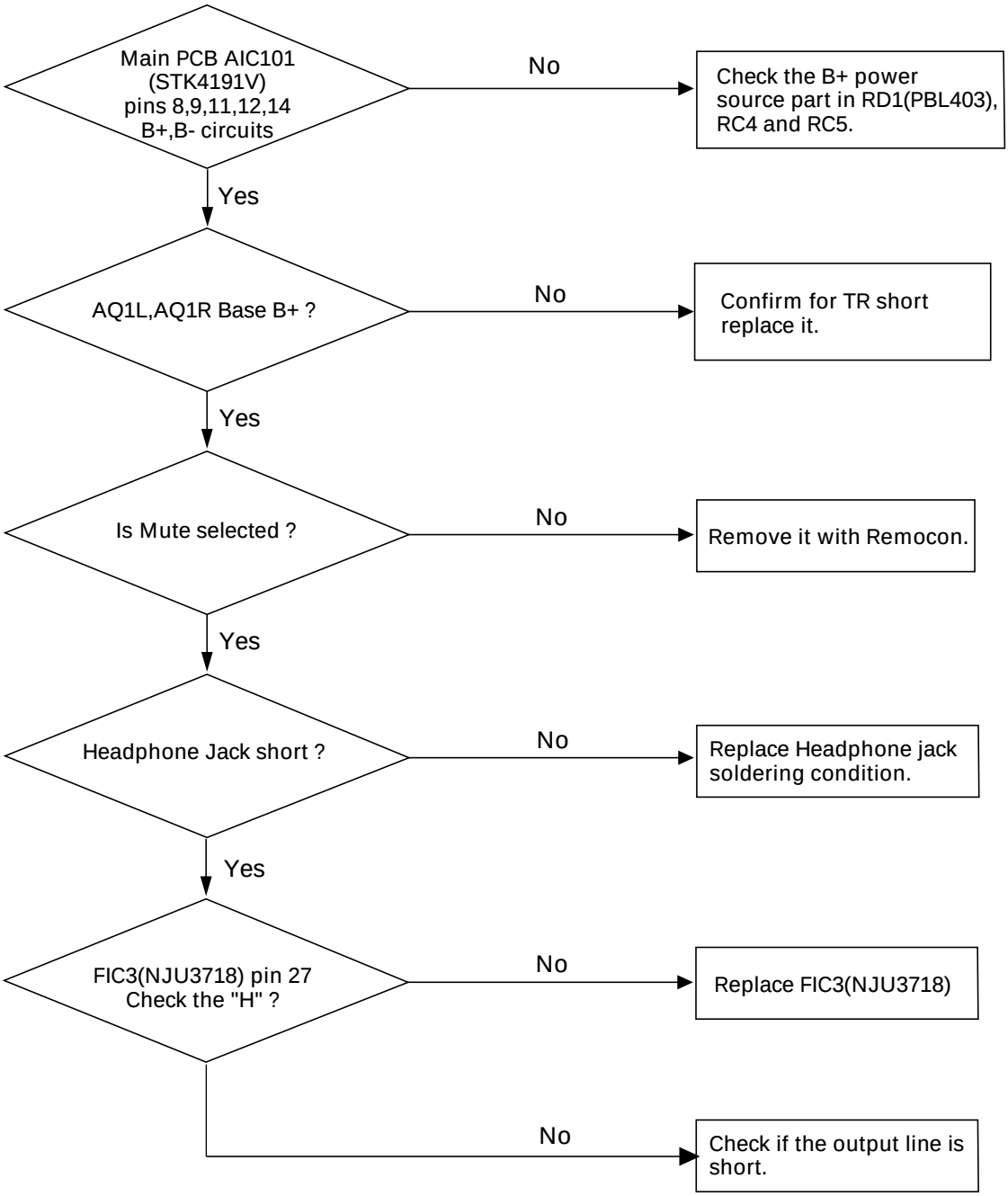
# 6. Troubleshooting

## 6-1 Amplifier

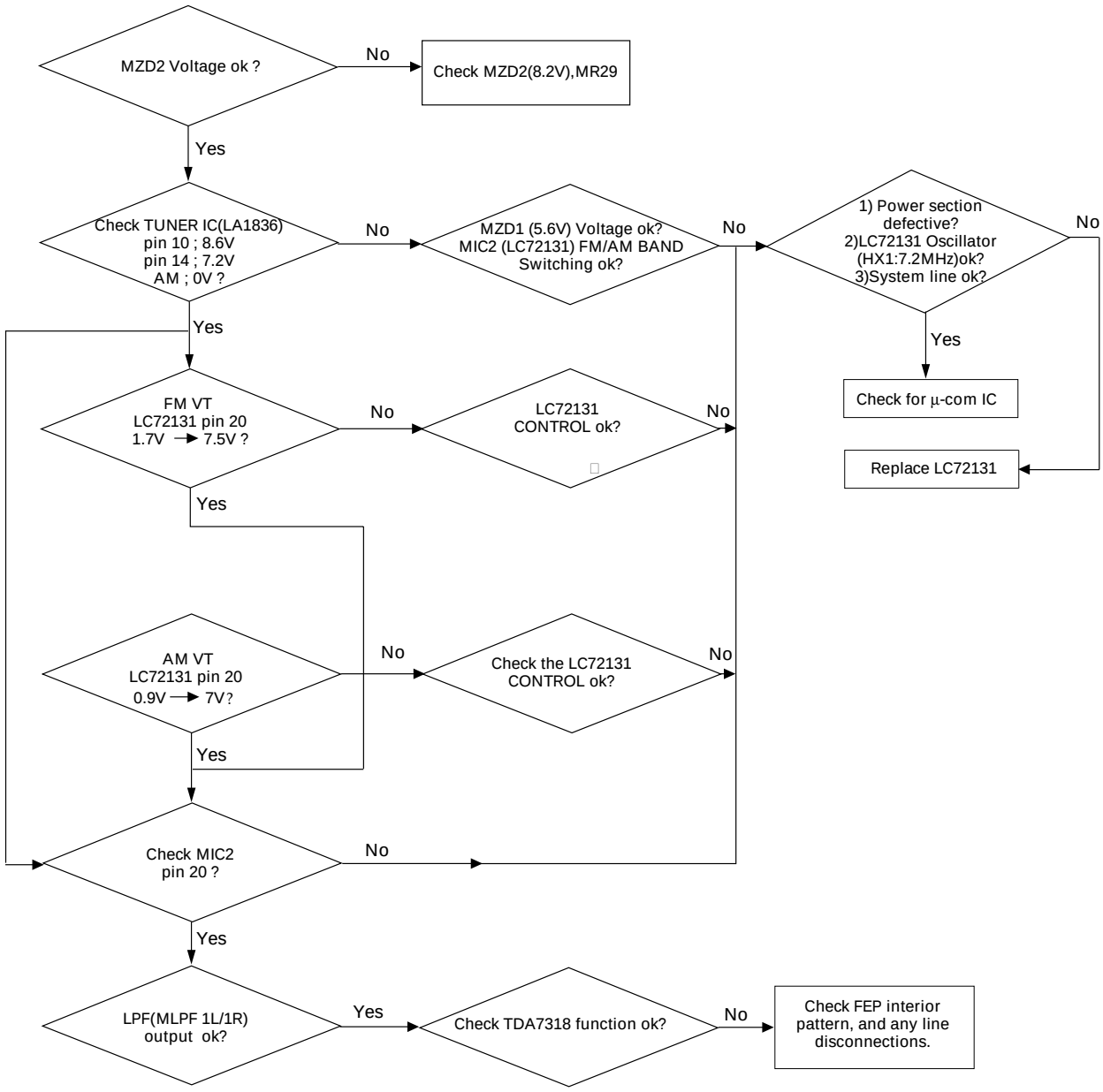
### 6-1-1 Power Malfunction


Front PCB μ-com VDD(5V) normal? UIC1 pins 18,47,90
No
Main PCB RIC1(MC7805) IN: 23V Input voltage normal?
No
Check the Power PCB; RD3(1N4001), RR2(22Ω, 3W)
Yes
Replace RIC1
Yes
Front PCB Does UX1(12MHz) oscillate ?
No
FRONT PCB PWR-SENS voltage normal ? (pin 29 ; 4.5V)
No
Check the Main PCB RD11,RR16,RC17,RZD6 RC16,RR17,RR26
Yes
Yes
Front PCB When the power is ON 'H' displays at pin 1 ?(5V)
No
Replace μ-com.
Yes
Connect Front PCB and Main PCB. Check the connector Main PCB. Wafer CCW1,CCW2
No
Check the Power PCB : P/T, FUSE

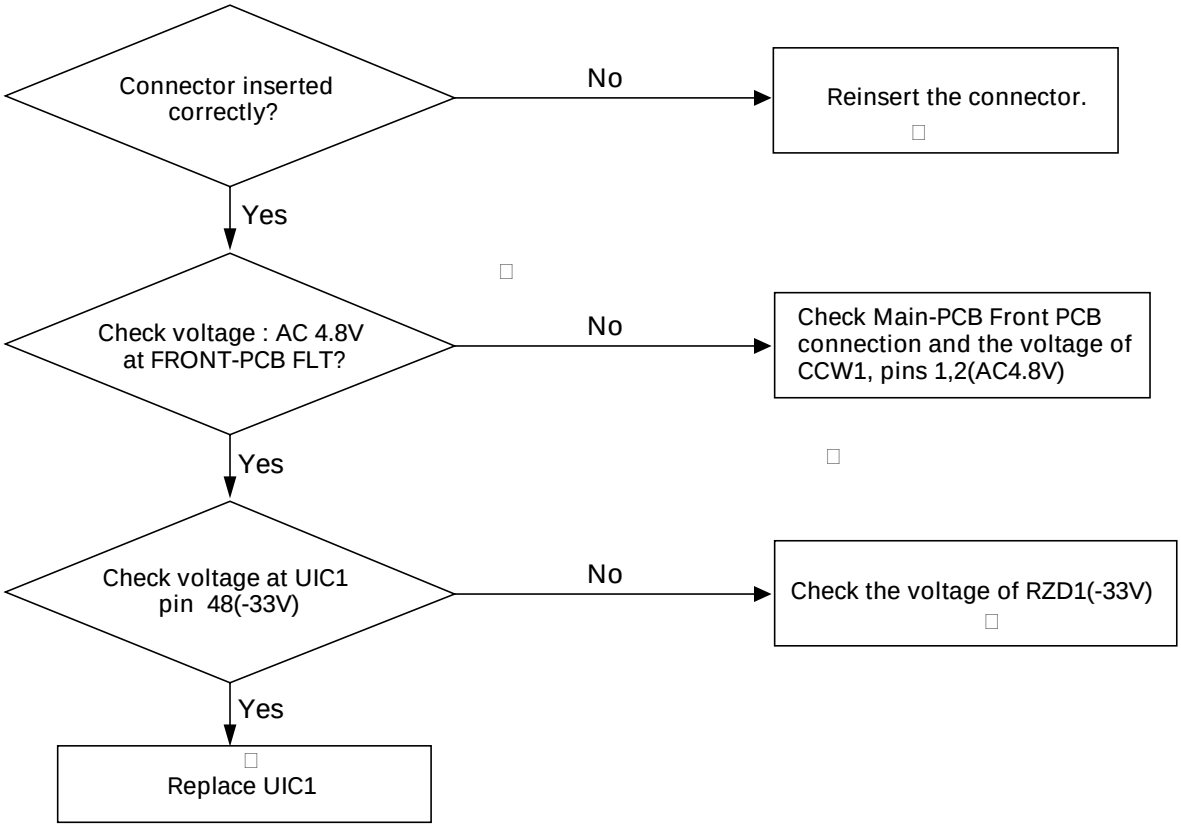
## 6-1-2 No Output



## 6-1-3 Tuner Malfunction(FM/AM)



## 6-1-4 V.F.D Malfunction

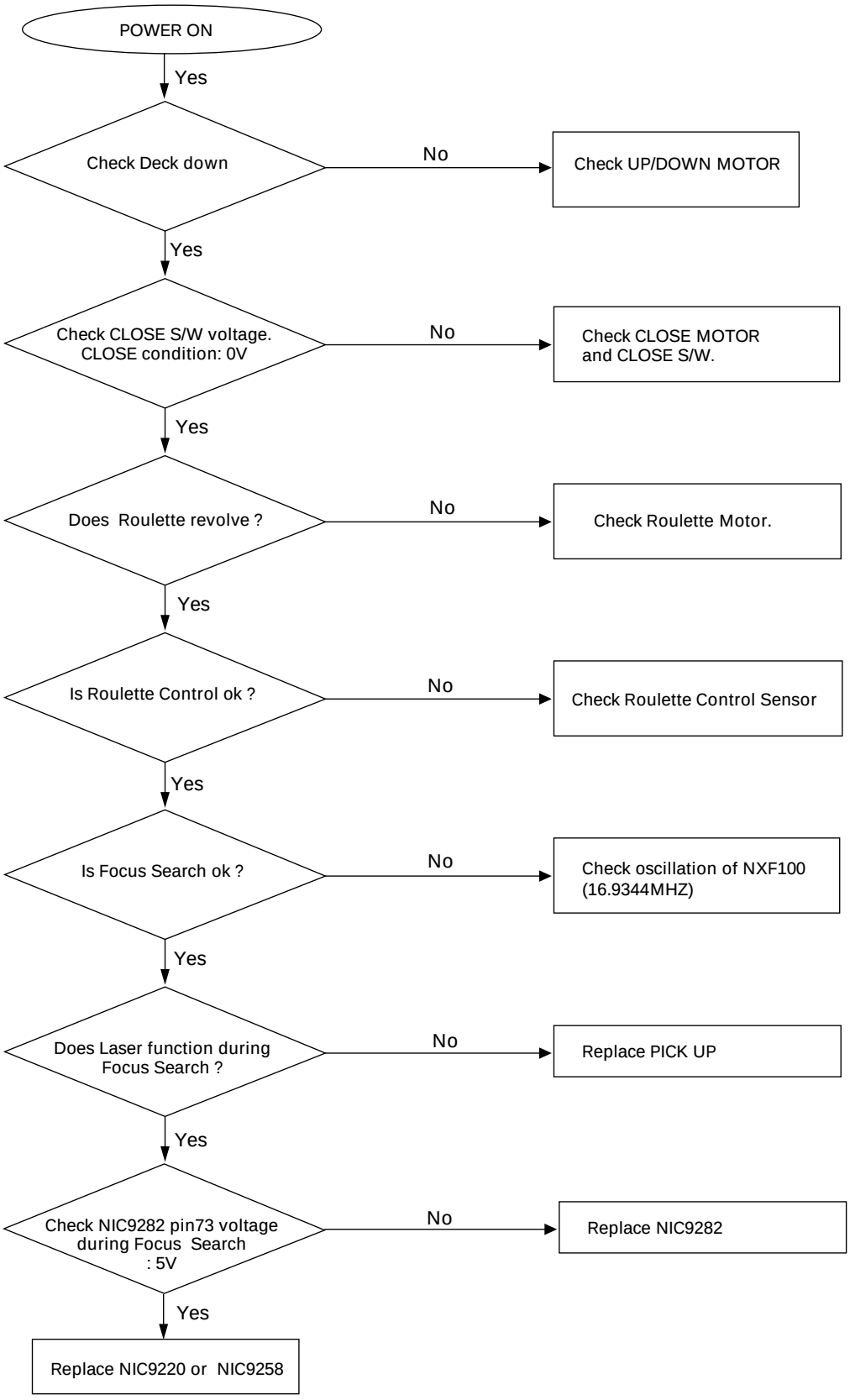


# 6-2 Cassette Deck

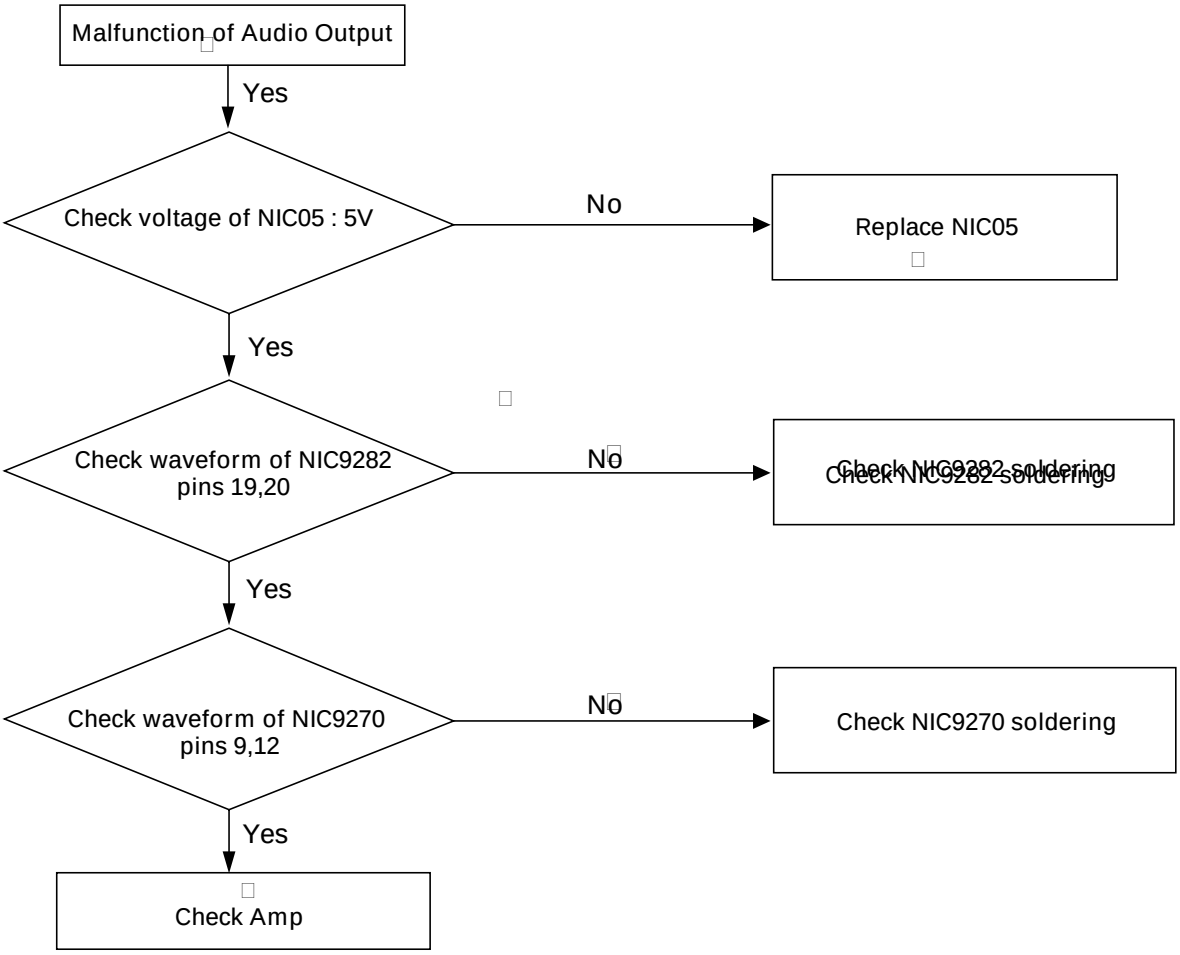
<table>
<tr><th>Block</th><th>Main Function</th><th>Check Point</th></tr>
<tr><td rowspan="2">TAPE IC JIC1<br>(BA3442AKS)</td><td>Convert of P/B & R/P SIGNAL<br>& DECK OUTPUT OF IC</td><td>Check for voltage at pin32<br>1 P/B Deck : L<br>2 P/B DECK : H<br>Check for pin 24 of FIC3 when deck operate</td></tr>
<tr><td>AMPS</td><td>Check for voltage at pin 28<br>When between song : High(Normal)<br>When playing song : Low(Normal)</td></tr>
<tr><td rowspan="2">DOLBY NR AMP<br>DIC1 (KA2271)</td><td>Convert P/B & Source Signal</td><td>Check for voltage at pin 4<br>R/P mode : High<br>R/P mode : Low<br>Dubbing mode : High<br>When in operative FIC3 pin26 check<br><table><tr><th>Mode</th><th>FIC3 pin12</th></tr><tr><td>P/B</td><td>H</td></tr><tr><td>R/P</td><td>L</td></tr><tr><td>DUBBING</td><td>H</td></tr></table></td></tr>
<tr><td>Convert DOLBY NR ON/OFF</td><td>DIC1 pin 13 check<br><table><tr><th>Mode</th><th>FIC3 pin12</th></tr><tr><td>OFF</td><td>H</td></tr><tr><td>ON</td><td>L</td></tr></table></td></tr>
<tr><td rowspan="2">BIAS OSC</td><td>Oscillate RECORD BIAS (105KHz)</td><td>TP2 check<br>Osc Frequency : 105KHz<br>When inoperative : LQ4,LQ5 check</td></tr>
<tr><td>Oscillate RECORD BIAS (105KHz)</td><td>DQ1,1R,Gate check<br><table><tr><th>Mode</th><th>DQ1L/1R</th></tr><tr><td>REC</td><td>-10V</td></tr><tr><td>PLAY</td><td>1.4V</td></tr></table></td></tr>
<tr><td>µ-com UIC1</td><td>Control DECK MECHA<br>Control VF DISPLAY<br>Control MUTE circuit<br>Control each circuit</td><td>Check for RESET<br>When power is turned ON</td></tr>
<tr><td>VF DISPLAY</td><td>Drive VF DISPLAY</td><td>Check VF DISPLAY</td></tr>
</table>

# 6-3 CD

## 6-3-1 Revolution Malfunction



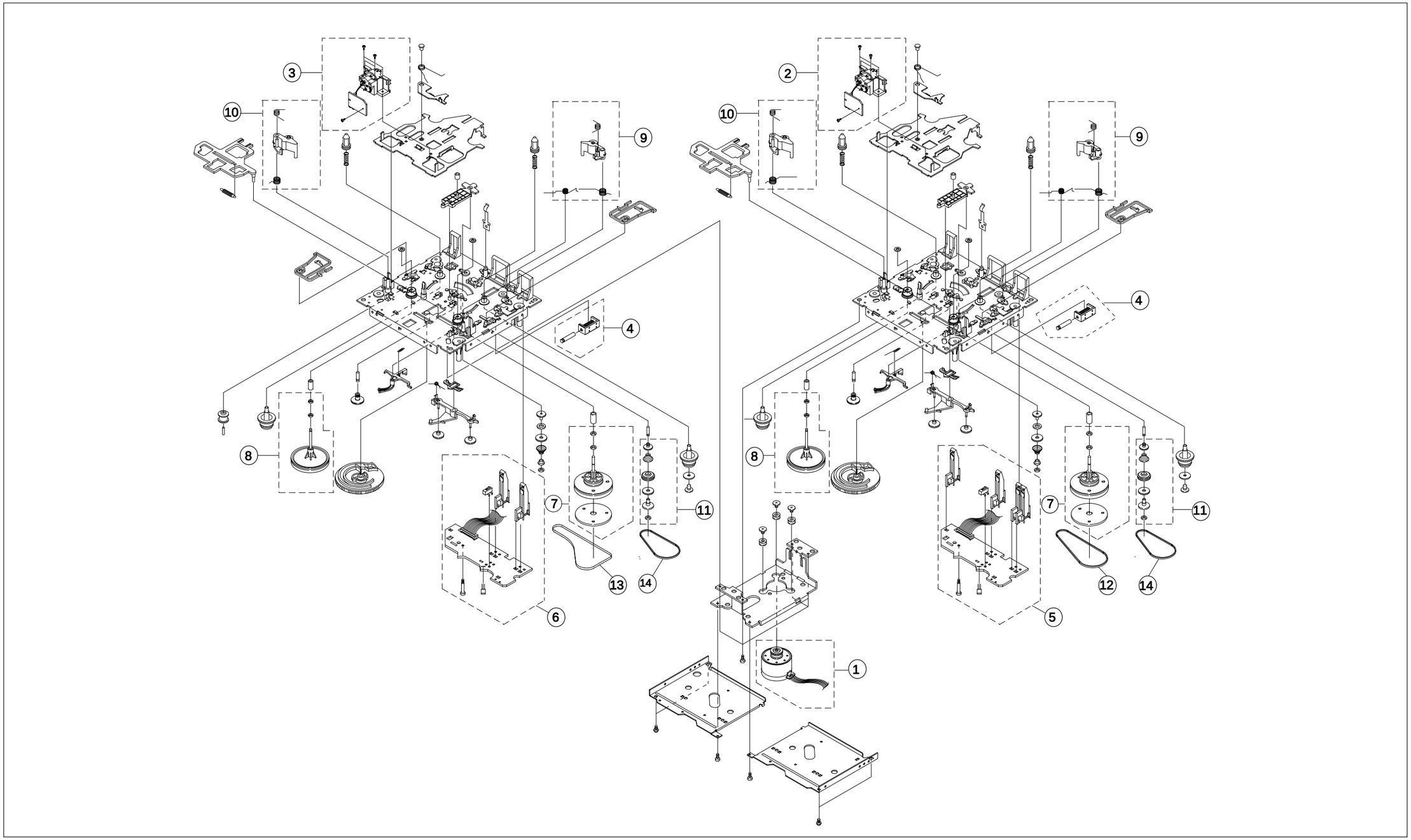
## 6-3-2 Audio Output Malfunction



# 7.Exploded Views and Parts List

## 7-1 Cassette Deck Exploded View and Parts List

### 7-1-1 Cassette Deck Exploded View



## 7-1-2 Parts List

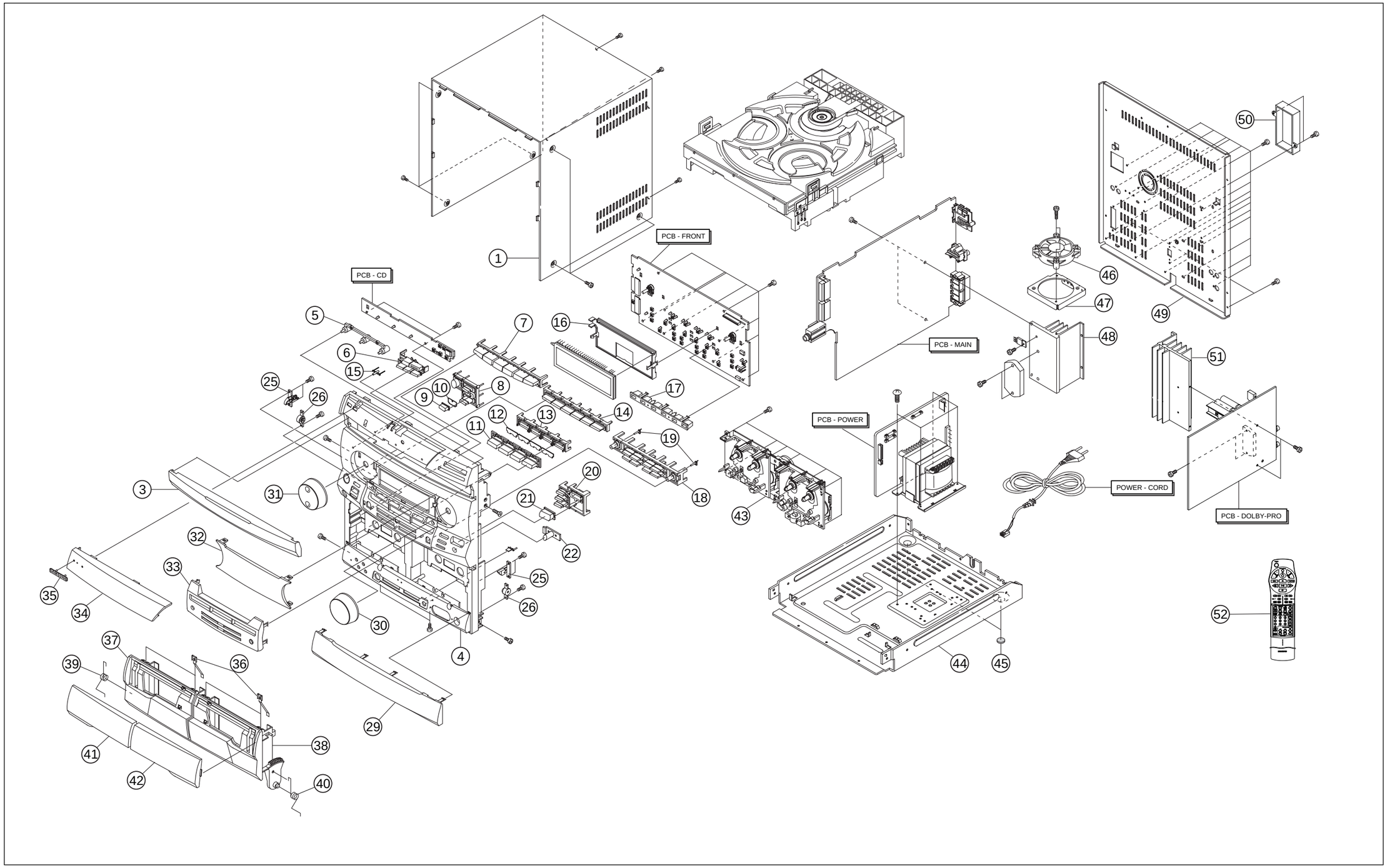
| No. | New Code No. | Description | Specification | Old Code No. |
|---|---|---|---|---|
| | AH59-20004J | CASSETTE DECK | ADR2112TW | |
| 1 | AH81-10798A | MOTOR ASS'Y | SHU2L-DOUBLE | |
| 2 | AH81-10798C | HEAD ASS'Y(R/P) | YK56RBB4N3 | |
| 3 | AH81-10798D | HEAD ASS'Y(P/B) | YK50PBB4N3 | |
| 4 | AH81-10798E | SOLENOID ASS'Y | ADR2100-01 | |
| 5 | AH81-10798F | CNTR ASS'Y(R/P) | ADR2100-02 | |
| 6 | AH81-10798G | CNTR ASS'Y(P/B) | ADR2100-03 | |
| 7 | AH81-10798H | FLYWHEEL ASS'Y(F) | ADR2100-04 | |
| 8 | AH81-10798J | FLYWHEEL ASS'Y(R) | ADR2100-05 | |
| 9 | AH81-10798K | PINCH ARM(F) | ADR2100-06 | |
| 10 | AH81-10798M | PINCH ARM(R) | ADR2100-07 | |
| 11 | AH81-10798N | CLUTCH ASS'Y | ADR2100-08 | |
| 12 | AH81-10798P | MAIN BELT(R/P) | ADR2112TW-01 | |
| 13 | AH81-10798S | MAIN BELT(P/B) | ADR2112TW-02 | |
| 14 | AH81-10798U | SUB BELT | ADR2100-09 | |

## 7-2-2 Parts List

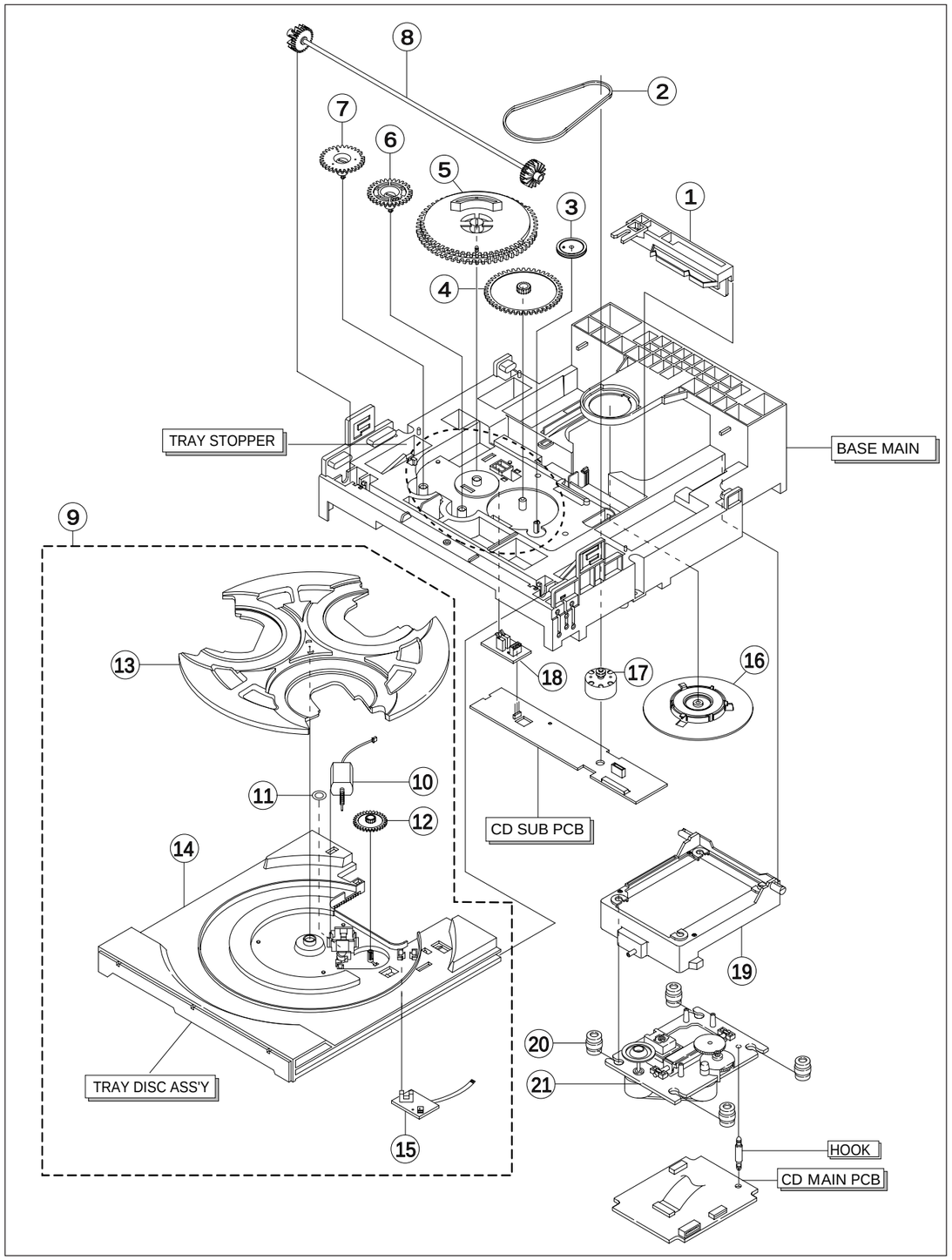
| No. | New Code No. | Description | Specification | Old Code No. |
|---|---|---|---|---|
| 1 | AH64-30351A | CABINET-TOP | PVC STEEL,T0.75 MAX630 | |
| 3 | AH64-50305E | DOOR-TRAY | SILVER | |
| 4 | AH64-30350L | CABINET-FRONT | MIPS BLK,MAX630 | |
| 5 | AH67-10103A | LENS-SKIP | PMMA, TRP+TI02,MAX630 | |
| 6 | AH64-11003B | KNOB-OPEN/CLOSE | SILVER | |
| 7 | AH64-11005A | KNOB-DIRECTON | ABS 94HB,BLK,MAX630 | |
| 8 | AH64-11008B | KNOB-POWER | SILVER | |
| 9 | AH67-10100C | LENS-AI OFF | PMMA, +TI02, MAX630 | |
| 11 | AH64-11004A | KNOB-FUNCTION | PMMA +TI02 MAX630 | |
| 13 | AH61-20355A | HOLDER-FUNCTION | ABS 94HB,WHT MAX630 | |
| 14 | AH64-10999A | KNOB-ENTER | ABS 94HB,BLK,MAX630 | |
| 15 | AH67-10105A | LENS-JOG | PMMA +TI02 MAX630 | |
| 16 | AH61-20079A | HOLDER-VFD | ABS 94HB,BLK MAX-380 | |
| 17 | AH61-20359A | HOLDER-DIRECTION | ABS 94HB,WHT MAX630 | |
| 18 | AH64-11006B | KNOB-DECK | SILVER | |
| 19 | AH67-10101A | LENS-KNOB | PMMA +TI02 MAX630 | |
| 20 | AH64-11007B | KNOB-SBS | SILVER | |
| 21 | AH67-10104C | LENS-PRO | PMMA +TI02 MAX632P | |
| 22 | AH67-10102A | LENS-REMOCON | PMMA BRN MAX630 | |
| 25 | AH95-50001A | LATCH-ASS'Y | MAX555 | |
| 26 | AH61-80030A | DAMPER-ASS'Y | POM, N0.8,G130,BLK,MAX630 | |
| 29 | AH61-20358F | CAP-DUMMY | ABS 94HB, BLK MAX632P | |
| 30 | AH64-11011B | KNOB-VOLUME | ABS 94HB,BLK MAX630 | |
| 31 | AH64-11002B | KNOB-JOG | SILVER | |
| 32 | AH64-40350C | WINDOW-TUNER | PMMA,VIO,MAX630 | |
| 33 | AH61-20352G | CAP-FRONT | SILVER | |
| 34 | AH64-40351P | WINDW-CD | PMMA VIO MAX632P | |
| 35 | AH64-70003B | BADGE-BRAND | AL, L30 | |
| 36 | AH61-60192A | SPRING TAPE | SUS, PI0.35,COM | |
| 37 | AH64-50303D | DOOR-CASS,A | SILVER | |
| 38 | AH64-50304D | DOOR-CASS,B | SILVER | |
| 39 | AH61-60305A | SPRING-DOOR,L | TS,SUS27,PI1.0 MAX-630 | |
| 40 | AH61-60306A | SPRING-DOOR,R | TS,SUS27,PI1.0 MAX-630 | |
| 41 | AH64-40352C | WINDOW-DOOR,A | PMMA VIO MAX-630 | |
| 42 | AH64-40353C | WINDOW-DOOR,B | PMMA VIO MAX-630 | |
| 43 | AJ59-20004J | DECK-CASSETTE | ADR2112TW | |
| 44 | AH64-30352A | CABINET-BOTTOM | SECC,T1.0 MAX630 | |
| 45 | AH64-80032A | FOOT-CUSHION | HH-38C T2.0 BLK, MAX-630 | |
| 46 | AH31-10020A | FAN-DC | D0620B-12M, 12VDC 10.16A | |
| 47 | AH61-10627A | BRKT-FAN | SECC T1.0 NTR MAX-630 | |
| 48 | AH62-30105A | HEAT-SINK,M | AL T6.0 WHT MAX-630 | |
| 49 | AH64-30353K L | CABINET-REAR | 2 VOLTAGE,SECC,T0.8,GRAY -,SECC,T0.8,GRAY | |
| 50 | AH63-30071A | COVER-REAR | ABS 94HB MQ485Z | |
| 51 | AH62-30121A | HEATSINK PRO | AL EXTR MAX632P | |
| 52 | AH59-10096A | REMOCON-ASSY | MAX-632P | |

# 7-2 Main Exploded View and Parts List

## 7-2-1 Exploded View



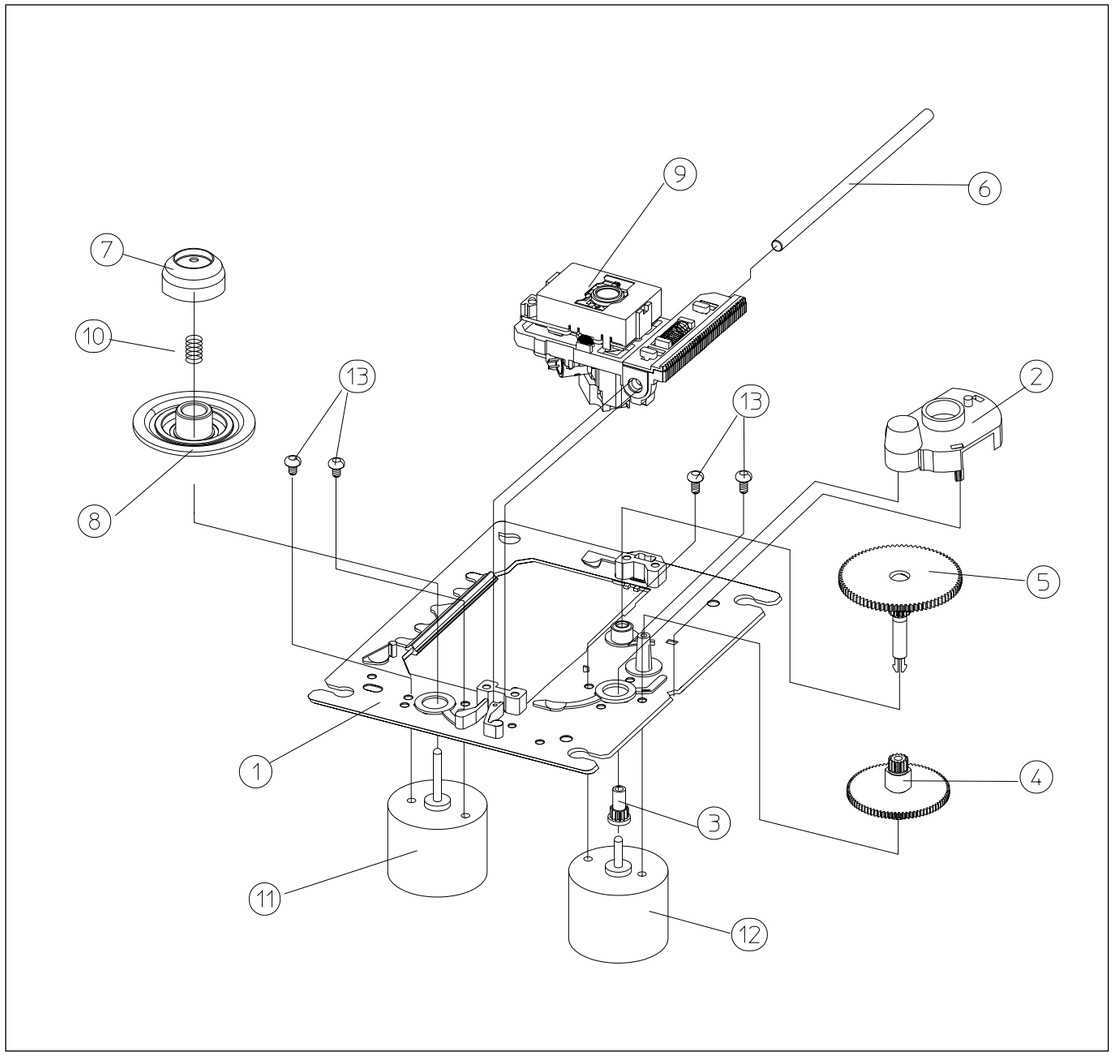
# 7-3 CD Mecha Exploded View and Parts List




| No. | New Code No. | Description | Specification | Old Code No. |
|---|---|---|---|---|
| 1 | AH66-80022A | SLIDER-CAM | ABS HF-380 NTR | |
| 2 | AH66-60034A | BELT-LOAD | CR | |
| 3 | AH66-20186A | GEAR-PULLEY | POM(M90-44) WHT | |
| 4 | AH66-20187A | GEAR-LOAD | POM(M90-44) BLK | |
| 5 | AH66-20188A | GEAR-CAM | POM(M90-44) WHT | |
| 6 | AH66-20189A | GEAR-TRAY | POM(M90-44) BLK | |
| 7 | AH66-20190A | GEAR-CONVERT | POM(M90-44) WHT | |
| 8 | AH66-20191A | GEAR-SYNCRO | ABS HF-380 NTR | |
| 9 | AH59-10097A | ASSY-TRAY DISC | CMS-300, ASS'Y-TRAY | |
| 10 | AH59-10098A | ASS-WORM-MOTOR | CMS-300, ASS'Y-WORM | |
| 11 | AH69-20044A | CUSHION-MOTOR | NBR BLK | |
| 12 | AH66-20193A | GEAR-ROULETTE | POM(M90-44) BLK | |
| 13 | AH66-90056A | TRAY-ROULETTE | ABS XR-401 BLK | |
| 14 | AH66-90055A | TRAY-DISC | -,ABS,-,BLK | |
| 15 | AH59-10099A | ASSY-PCB SENSOR | CMS-300,ASS'Y SENSOR | |
| 16 | AH59-10100A | ASSY-TABLE CHUCK | CMS-300,ASS'Y CHUCK | |
| 17 | AH59-10101A | ASSY-PULLEY-MOTOR | CMS-300,ASS'Y CHUCK | |
| 19 | AH66-30086A | LEVER-LIFTER | ABS HF-380 BLK | |
| 20 | AH73-10016A | RUBBER-CD | IRR | |
| 21 | AJ59-20003F | DECK-CDP | DECK-CD *CMS-A30NG6 | |

# 7-4 CD Deck Exploded View and Parts List

## 7-4-1 Exploded View




## 7-4-2 Parts List

| No. | New Code No. | Description | Specification | Old Code No. |
|---|---|---|---|---|
| | CMSP30NM6 | DECK-CD | BASIC | |
| 1 | AH61-10022C | CHASSIS-DECK(M) | CMSA30 POM M90-44 | 12001-0052-02 |
| 2 | AH63-30048A | COVER-GEAR | CMS-V30 BLK ABS | 13313-0057-00 |
| 3 | AH66-20016A | GEAR(A) | CMS-V30 M0.3 Z13 SP POM | 11474-0017-00 |
| 4 | AH66-20017A | GEAR(B) | CMS-V30 M0.3 Z13 SP POM | 11474-0018-00 |
| 5 | AH66-20018A | GEAR(C) | CMS-V30 M0.3 Z16/Z90 SP POM | 11747-0019-00 |
| 6 | AH71-50036A | SHAFT-PU | CMS-V30 D3 L79 SUS420J2 | 11404-0041-00 |
| 7 | 15253-503-011 | CENTER-RING | ABS+GS 20% CMS-V10N | 15253-503-011 |
| 8 | AH66-90018A | TURN-TABLE(M) | ABS+GS 20% CMS-V10N | 1223-0003-00 |
| 9 | AJ30-20001B | PICK-UP CDP | P/U SOH-A1 ROW V-P/J | *SOH-AP |
| 10 | AH61-60055A | SPRING-T/TABLE | CS STS-W PI0.4 D5.7 L9.3 CMS-V10N | 12724-0062-00 |
| 11 | AH31-10009A | MOTOR-SPINDLE | RF-310T-11400 43L 25V 85mA | 16829-0004-00 |
| 12 | AH31-10002B | MOTOR-FEED | RF-310ta 30MM NDM4RA3ETL 11.0MM | 14769-057-250 |
| 13 | AH60-10014A | SCREW-PH(+M2*3) | +M2X3 FE FZY W700 | 17008-120-032 |

# 8. Electrical Parts List

| Location No. | New Code No. | Description | Specification | Old Code No. |
|---|---|---|---|---|
| | AH26-80141B | TRANS-POWER;EI85.8X57,115/230V,60/5 | | |
| | AH39-10002K | POWER CORD;CP2,KLCE-2F,2.15M,5239,V | | A6006-0186 |
| | AH59-10096A | REMOCON-ASSY;-,-,-,60,MAX632P,S.S | | |
| | 14539-504-030 | CERAMIC-RESONATOR;CSB455EBL | | |
| | AH11-10003F | IC-MASK ROM;BU2478,-,SOP | | |
| | AH59-90192F | SPEAKER-SYSTEM;PS 632P,MAX632,ERP | | |
| | AH90-10722Q | ASSY-MAIN PCB;MAX632P,SEG | | |
| LD1L,1R,2L,2R,3L,3R,4,5,6<br>AD3,4,CD1,2,3<br>MD1,2,3,4,5,6,KD1,3,AD1<br>JD1,5,RD10,14,15,17,18<br>AD2,JD6 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,5 | | |
| JD3,4,RD13,16<br>RD7,20<br>RD7,20 | 0402-000125 | DIODE-RECTIFIER;1N4001,50V,1A,DO-41 | | A4104-0001 |
| RD3,5,6,11,12 | 0402-000127 | DIODE-RECTIFIER;1N4002,100V,1A,DO-4 | | A4104-0053 |
| RD4 | 0402-000151 | DIODE-RECTIFIER;1N5392,100V,1.5A,DO | | 12169-201-140 |
| RD9 | 0402-000157 | DIODE-RECTIFIER;1N5402,200V,3A,DO-2 | | 12169-209-260 |
| RD1,2 | 0402-000450 | DIODE-BRIDGE;PBL403,200V,4.0A,DIP-4 | | 12169-219-330 |
| DJZD2 | 0403-000342 | DIODE-ZENER;UZ3.6BSA,3.6V,3.47-3.68 | | 12169-404-770 |
| RZD6 | 0403-000355 | DIODE-ZENER;UZ5.1BSB,5.1V,4.97-5.18 | | 12169-404-780 |
| FZD1 | 0403-000372 | DIODE-ZENER;UZ9.1BM,9.1V,8.5-9.6V,5 | | 12169-403-320 |
| RZD3 | 0403-000380 | DIODE-ZENER;UZP13B,13V,12.4-14.1V,1 | | 12169-403-740 |
| RZD1 | 0403-000382 | DIODE-ZENER;UZP15B,15V,13.9-15.6V,1 | | 12169-403-920 |
| RZD4 | 0403-000384 | DIODE-ZENER;UZP20B,20V,18.9-21.1V,1 | | 12169-403-930 |
| MZD1 | 0403-000394 | DIODE-ZENER;UZP5.6B,5.6V,5.2-6.0V,1 | | 12169-404-110 |
| RZD2,5 | 0403-000396 | DIODE-ZENER;UZP6.8B,6.8V,6.4-7.2V,1 | | 12169-404-100 |
| MZD2,DJZD1 | 0403-000398 | DIODE-ZENER;UZP8.2B,8.2V,7.7-8.7V,1 | | 12169-403-600 |
| RQ11,2,6 | 0501-000010 | TR-SMALL SIGNAL;KSC1008-Y,NPN,80V,6 | | 12149-301-050 |
| HQ2 | 0501-000294 | TR-SMALL SIGNAL;KSA708-Y,PNP,800MW, | | 12149-101-560 |
| KQ1,3 | 0501-000296 | TR-SMALL SIGNAL;KSA709-Y,PNP,800MW, | | 12149-101-570 |
| AQ2,3 | 0501-000331 | TR-SMALL SIGNAL;KSC1009-Y,NPN,800MW | | 12139-301-310 |
| LQ4,5,RQ7,10,DJQ3 | 0501-000369 | TR-SMALL SIGNAL;KSC2331-Y,NPN,1W,TO | | 12149-301-910 |
| HQ1,3 | 0501-000392 | TR-SMALL SIGNAL;KSC838-O,NPN,250MW, | | 12149-301-860 |
| CQ7,KQ2,HQ4,6,7<br>RQ12,14,LQ3,MQ1<br>FQ2 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW, | | 12149-301-900 |
| DQ2L,2R,AQ1L,1R | 0501-000407 | TR-SMALL SIGNAL;KSD471A-Y,NPN,800MW | | 12149-401-150 |
| CQ1,3,5 | 0501-000610 | TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO | | |
| RQ1,FQ1 | 0502-000241 | TR-POWER;KSA614,PNP,25W,TO-220,BK,4 | | 12139-103-560 |
| RQ4 | 0502-000424 | TR-POWER;2SB1566-F,PNP,2W,TO-220FN, | | B4052-0086 |
| RQ3 | 0502-000425 | TR-POWER;2SD2395-F,NPN,2W,TO-220FN, | | B4052-0087 |
| CQ2,4,6,8 | 0504-000118 | TR-DIGITAL;KSR1003,NPN,300MW,22K-22 | | 12159-301-780 |
| LQ1L,1R,DQ3,4,OQ1L,1R | 0504-000122 | TR-DIGITAL;KSR1009Y,NPN,300MW,4.7K, | | 12159-301-790 |
| DJQ1,2 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47 | | |
| LQ2,DQ5,KQ4,OQ2 | 0504-001003 | TR-DIGITAL;KSR2003,PNP,300MW,22K-22 | | |
| DQ1L,1R | 0505-000197 | FET-SILICON;2SK373Y,N,-,-,-,400MW,T | | B4054-0023 |

| Location No. | New Code No. | Description Specification | Old Code No. |
|---|---|---|---|
| BIC3,FIC2,4,HIC1 QIC1, SIC3 | 1201-000163 | IC-OP AMP;4560,SOP,8P,150MIL,DUAL,1 | 12119-401-300 |
| AIC1 | 1201-000340 | IC-POWER AMP;4191,SIP,18P,-,DUAL,-, | 12119-205-050 |
| JIC1 | 1201-000364 | IC-PREAMP;3442A,QFP,56P,-,DUAL,-,PL | B4012-0417 |
| RIC2 | 1203-000110 | IC-NEGA.FIXED REG.;7912,TO-220,3P,- | 12109-401-700 |
| RIC8 | 1203-000242 | IC-POSI.FIXED REG.;7812,TO-220,3P,- | 12109-401-690 |
| RIC1 | 1203-000276 | IC-POSI.FIXED REG.;7805,TO-220,3P,- | 12119-601-770 |
| RIC6 | 1203-000282 | IC-POSI.FIXED REG.;7806,TO-220,3P,- | 12119-601-830 |
| RIC7 | 1203-000294 | IC-POSI.FIXED REG.;7808,TO-220,3P,- | 12109-401-730 |
| DIC1 | 1204-000134 | IC-DNR PROCESSOR;KA2271B,DIP,16P,-, | 12109-323-990 |
| FIC1 | 1204-000235 | IC-VOLUME CONTROL;TDA7318,SOP,28P,- | B4008-1199 |
| FIC5 | 1204-001028 | IC-VOLUME CONTROL;LC7536,DIP,30P,27 | |
| RR9-1,36-1,RR2-1 | 13954-100-310 | CERAMIC-PIPE;PI1.4 15MM WHT | |
| RR6 | 13954-500-210 | CERAMIC-PIPE;PI1.4 7MM | |
| THERMISTOR | 1404-000172 | THERMISTOR-NTC;100OHM,-,-,-,BK | |
| DR57 | 2001-000005 | R-CARBON;390OHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-391 |
| DR19 | 2001-000027 | R-CARBON;100OHM,5%,1/4W,AA,TP,2.4X6 | 11018-277-101 |
| AR12 | 2001-000028 | R-CARBON(S);100OHM,5%,1/2W,AA,TP,2. | 11018-377-101 |
| RR35 | 2001-000065 | R-CARBON;10KOHM,5%,1/4W,AA,TP,2.4X6 | 11018-277-103 |
| RR31,11 | 2001-000066 | R-CARBON(S);10KOHM,5%,1/2W,AA,TP,2. | 11018-377-103 |
| RR20 | 2001-000068 | R-CARBON;12KOHM,5%,1/4W,AA,TP,2.4X6 | 11018-277-123 |
| AR7,15 | 2001-000070 | R-CARBON;15KOHM,5%,1/4W,AA,TP,2.4X6 | 11018-277-153 |
| RR23,28 | 2001-000071 | R-CARBON;22KOHM,5%,1/4W,AA,TP,2.4X6 | 11018-277-223 |
| DR61 | 2001-000109 | R-CARBON(S);470OHM,5%,1/2W,AA,TP,2. | 11018-377-471 |
| FR3 | 2001-000111 | R-CARBON;150OHM,5%,1/4W,AA,TP,2.4X6 | 11018-277-151 |
| RR3,4 | 2001-000117 | R-CARBON(S);68OHM,5%,1/2W,AA,TP,2.4 | 11018-377-680 |
| AR8,10,DR35 | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-101 |
| DR34,37 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-103 |
| MR17 | 2001-000302 | R-CARBON;10OHM,5%,1/8W,AA,TP,1.8X3. | 11018-877-100 |
| MR11,DR20 | 2001-000331 | R-CARBON;12KOHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-123 |
| MR43L,43R,RR29 | 2001-000411 | R-CARBON;18KOHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-183 |
| AR1L,1R,2R,BR8L,8R MR25,JR5L,5R,SR44R | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3. | 11018-877-102 |
| MR15,RR7,8,32 FR4,JW13 | 2001-000449 | R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X | 11018-877-222 |
| FR4,JW13 | | | |
| RR39 | 2001-000508 | R-CARBON;220KOHM,5%,1/8W,AA,TP,1.8X | 11018-877-224 |
| AR3R | 2001-000515 | R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-221 |
| RR21,24,30,37,DR40R FR1,RR5 | 2001-000522 | R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-223 |
| FR6 | 2001-000613 | R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X | 11018-877-392 |
| DR12 | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X | 11018-877-472 |
| MR21 | 2001-000802 | R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X | |
| QR5R | 2001-000869 | R-CARBON;56OHM,5%,1/8W,AA,TP,1.8X3. | 11018-877-560 |
| FR2 | 2001-000890 | R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X | 11018-877-682 |
| DR24L,24R | 2001-000924 | R-CARBON;680OHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-681 |
| AR5,6 | 2001-001088 | R-CARBON(S);1KOHM,5%,1/2W,AA,TP,2.4 | 11018-377-102 |
| RR14 | 2001-001093 | R-CARBON(S);2.2KOHM,5%,1/2W,AA,TP,2 | 11018-377-222 |
| DR56 | 2001-001096 | R-CARBON(S);2.2OHM,5%,1/2W,AA,TP,2. | 11018-377-229 |
| JR11 | 2001-001140 | R-CARBON(S);39OHM,5%,1/2W,AA,TP,2.4 | 11018-377-390 |
| DR48 | 2001-001178 | R-CARBON(S);680OHM,5%,1/2W,AA,TP,2. | 11018-377-681 |

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|---|---|---|---|
| RR36 | 2003-000471 | R-METAL OXIDE(S);10OHM,5%,2W,AA,TP, | 11048-577-100 |
| MR33 | 2003-000522 | R-METAL OXIDE(S);180OHM,5%,1W,AA,TP | 11048-477-181 |
| RR19 | 2003-000534 | R-METAL OXIDE(S);1KOHM,5%,1W,AA,TP, | 11048-477-102 |
| RR2,9 | 2003-000593 | R-METAL OXIDE(S);22OHM,5%,3W,AA,TP, | 11048-677-220 |
| AR13L,13R | 2003-000690 | R-METAL OXIDE(S);4.7OHM,5%,2W,AA,TP | 11048-577-479 |
| RR1 | 2003-000701 | R-METAL OXIDE(S);470OHM,5%,2W,AA,TP | 11048-577-471 |
| MR29 | 2003-000708 | R-METAL OXIDE(S);47OHM,5%,1W,AA,TP, | 11048-477-470 |
| FR5 | 2003-000710 | R-METAL OXIDE(S);47OHM,5%,2W,AA,TP, | 11048-577-470 |
| RR6 | 2003-000800 | R-METAL OXIDE(S);820OHM,5%,2W,AA,TP | 11048-577-821 |
| J10,11,12,13,14,16,19,17<br>J20,21,22,23,26,27,28,29<br>J31,33,34,36,37,39<br>J40,41,42,43,44,45<br>DR33L,33R,JR10<br>J47,32,FJ1,2 | 2007-000029 | R-CHIP;0OHM,5%,1/10W,DA,TP,2012 | 11119-101-000 |
| RR34,DR32L,32R | 2007-000241 | R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012 | 11119-101-152 |
| DR1L,1R,26,42,43,44,50<br>DR36,51,52,DR71L,71R<br>MR32,RR15,SR40L<br>SR40R | 2007-000282 | R-CHIP;100KOHM,5%,1/10W,DA,TP,2012 | 11119-101-104 |
| DR18,JR9,AR14,MR4 | 2007-000290 | R-CHIP;100OHM,5%,1/10W,DA,TP,2012 | 11119-101-101 |
| BR7L,7R,DR13,27,45<br>DR54,55,59,MR14,16<br>MR36,37,DR60,62,39 | 2007-000300 | R-CHIP;10KOHM,5%,1/10W,DA,TP,2012 | 11119-101-103 |
| MR9 | 2007-000308 | R-CHIP;10OHM,5%,1/10W,DA,TP,2012 | 11119-101-100 |
| DR9L,9R | 2007-000355 | R-CHIP;12KOHM,5%,1/10W,DA,TP,2012 | 11119-101-123 |
| DR10L,10R,23<br>XR2L,2R | 2007-000409 | R-CHIP;15KOHM,5%,1/10W,DA,TP,2012 | 11119-101-153 |
| MR48 | 2007-000457 | R-CHIP;18KOHM,5%,1/10W,DA,TP,2012 | 11119-101-183 |
| FR1L,1R,DR11L,11R,16<br>MR6,31 | 2007-000468 | R-CHIP;1KOHM,5%,1/10W,DA,TP,2012 | 11119-101-102 |
| AR2L,DR58,KR1,QR1L<br>RR41,42,SR44L | 2007-000468 | R-CHIP;1KOHM,5%,1/10W,DA,TP,2012 | 11119-101-102 |
| DJR2,DR4L,4R,JR7L,7R<br>MR50,RR43,22<br>BR9L,9R<br>SR2L,2R | 2007-000493 | R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012 | 11119-101-222 |
| DR7 | 2007-000498 | R-CHIP;2.2MOHM,5%,1/10W,DA,TP,2012 | 11119-101-225 |
| MR5<br>BR10L,10R | 2007-000518 | R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012 | 11119-101-272 |
| MR10,46,AR3L<br>AR3R<br>AR3R | 2007-000572 | R-CHIP;220OHM,5%,1/10W,DA,TP,2012 | 11119-101-221 |
| DJR1,JR8L,8R,KR2,5<br>MR13,20,47<br>DR40L,RR13,18<br>AR5L,5R<br>RR10,BR11 | 2007-000586 | R-CHIP;22KOHM,5%,1/10W,DA,TP,2012 | 11119-101-223 |
| MR27 | 2007-000593 | R-CHIP;22OHM,5%,1/10W,DA,TP,2012 | 11119-101-220 |
| RR38,SR39L,39R | 2007-000653 | R-CHIP;27KOHM,5%,1/10W,DA,TP,2012 | 11119-101-273 |
| DR70,MR45,28,SR2L,2R | 2007-000686 | R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012 | 11119-101-332 |

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|---|---|---|---|
| RR16 | | | |
| CR1L,1R,DR46,47,DSR6 | 2007-000710 | R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012 | 11119-101-392 |
| MR26,44L,44R,RR26 | | | |
| MR49 | 2007-000766 | R-CHIP;330OHM,5%,1/10W,DA,TP,2012 | 11119-101-331 |
| DR31L,31R,XR1L,1R | 2007-000774 | R-CHIP;33KOHM,5%,1/10W,DA,TP,2012 | 11119-101-333 |
| DR17,SR3L,3R | | | |
| MR8 | 2007-000822 | R-CHIP;390OHM,5%,1/10W,DA,TP,2012 | 11119-101-391 |
| DR28 | 2007-000830 | R-CHIP;39KOHM,5%,1/10W,DA,TP,2012 | 11119-101-393 |
| MR1,2,19,23,24,38 | 2007-000872 | R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012 | 11119-101-472 |
| MR39,40,41,BR14,25 | | | |
| BR29,KR3,RR17,33 | | | |
| FR4L,4R,QR3L,3R,4L,4R | | | |
| QR2L,2R,JR11L,11R | 2007-000941 | R-CHIP;47KOHM,5%,1/10W,DA,TP,2012 | 11119-101-473 |
| SR29,35 | | | |
| JR1L,1R,2L,2R,6L,6R | | | |
| SR1L,1R | | | |
| DR6L,6R,5L,5R,30L,30R | 2007-000981 | R-CHIP;5.6KOHM,5%,1/10W,DA,TP,2012 | 11119-101-562 |
| DR8,38,DR41L,41R | | | |
| CR2L,2R,3L,3R,KR4,6 | | | |
| RR25,FR2L,2R,MR18 | | | |
| AR4L,4R,9L,9R,DR15 | 2007-001039 | R-CHIP;56KOHM,5%,1/10W,DA,TP,2012 | 11119-101-563 |
| QR5L | | | |
| DR7L,7R,21,22 | 2007-001071 | R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012 | 11119-101-682 |
| RR27,MR34 | | | |
| AR11L,11R,DR49,53 | 2007-001118 | R-CHIP;680OHM,5%,1/10W,DA,TP,2012 | 11119-101-681 |
| MR30 | | | |
| SR28,34 | 2007-001177 | R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012 | 11119-101-822 |
| DR2L,2R | 2007-001201 | R-CHIP;820OHM,5%,1/10W,DA,TP,2012 | 11119-101-821 |
| DR3L,3R | 2007-001213 | R-CHIP;82OHM,1%,1/10W,DA,TP,2012 | 11119-102-820 |
| RR12 | 2008-000154 | R-FUSIBLE;33OHM,5%,1/4W,AA,TP,2.6X6 | A1010-0023 |
| MSR1 | 2103-000171 | VR-SEMI;10KOHM,30%,1/10W,TOP | 11249-102-034 |
| DSR1L,1R | 2103-000248 | VR-SEMI;200KOHM,30%,1/10W,TOP | 11249-102-094 |
| DSR3L,4L,MSR2 | 2103-000290 | VR-SEMI;20KOHM,30%,1/10W,TOP | 11249-102-044 |
| DSR5 | 2103-000341 | VR-SEMI;2KOHM,30%,1/10W,TOP | 11249-102-104 |
| DSR2L | 2103-000461 | VR-SEMI;50KOHM,30%,1/10W,TOP | 11249-102-064 |
| LC1L,1R,MC42 | 2201-000368 | C-CERAMIC,DISC;220PF,10%,50V,SL,6.5 | 11407-018-221 |
| RC1,3 | 2201-000520 | C-CERAMIC,DISC;4.7NF,+80-20%,400VAC | 11469-501-070 |
| AC13L,13R | 2201-000565 | C-CERAMIC,DISC;47nF,20%,50V,Y5V,12. | 11417-344-473 |
| AC11L,11R | 2201-000753 | C-CERAMIC,DISC;4.7NF,10%,50V,Y5P,-, | |
| MC27 | 2202-000796 | C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P | 11449-518-102 |
| MC6 | 2202-000807 | C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25 | 11448-010-223 |
| MC11 | 2202-000854 | C-CERAMIC,MLC-AXIAL;47NF,0.3,50V,Y5 | |
| FC2L,2R,3L,3R,JC11 | 2203-000199 | C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5 | |
| FJC1,2,FSC1,2,FFC1,FDC1 | 2203-000199 | C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5 | |
| ZC8,9,10 | | | |
| MC33,34,35,24,XC1L,1R | 2203-000239 | C-CERAMIC,CHIP;100PF,5%,50V,NPO,201 | 11129-009-101 |
| SC2L,2R | | | |
| DC39L,39R | 2203-000323 | C-CERAMIC,CHIP;12NF,10%,50V,X7R,201 | 11129-004-123 |
| LC4 | 2203-000374 | C-CERAMIC,CHIP;15NF,5%,50V,X7R,2012 | 11129-004-153 |
| MC26 | 2203-000408 | C-CERAMIC,CHIP;180PF,5%,50V,NPO,201 | 11129-008-181 |
| MC14 | 2203-000417 | C-CERAMIC,CHIP;18NF,10%,50V,X7R,201 | 11129-004-183 |

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|---|---|---|---|
| MC3 | 2203-000429 | C-CERAMIC,CHIP;18PF,5%,50V,NPO,2012 | 11129-008-180 |
| LC5 | 2203-000495 | C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,20 | 11129-004-222 |
| FJC4L,4R,3,FDC2,3 | | | |
| FC11,12 | 2203-000533 | C-CERAMIC,CHIP;2.7NF,10%,50V,X7R,20 | 11129-004-272 |
| DC7L,7R,23,19,MC1,5,6 | 2203-000609 | C-CERAMIC,CHIP;22NF,10%,50V,X7R,201 | 11129-004-223 |
| MC43 | 2203-000671 | C-CERAMIC,CHIP;27NF,10%,50V,X7R,201 | 11129-001-273 |
| DC46L,46R,MC47L,47R | 2203-000716 | C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,20 | 11129-004-332 |
| MC15 | 2203-000787 | C-CERAMIC,CHIP;330PF,5%,50V,NPO,201 | |
| MC16L,16R | 2203-000802 | C-CERAMIC,CHIP;33NF,10%,50V,X7R,201 | 11129-001-333 |
| LC6 | 2203-000892 | C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,20 | |
| JC10L,10R | | | |
| MC36 | 2203-000919 | C-CERAMIC,CHIP;470NF,+80-20%,16V,Y5 | |
| AC3L,3R,DC45L,45R | 2203-000953 | C-CERAMIC,CHIP;470PF,5%,50V,NPO,201 | 11129-004-471 |
| DC2L,2R | | | |
| MC2,8,10,22,MFC1 | 2203-000979 | C-CERAMIC,CHIP;47NF,10%,50V,X7R,201 | |
| LC10L,10R | 2203-001223 | C-CERAMIC,CHIP;820PF,10%,50V,X7R,20 | A1100-0023 |
| MC30 | 2203-001517 | C-CERAMIC,CHIP;15PF,5%,50V,NPO,2012 | |
| DC15,40L,40R,41,43,44 | 2203-001537 | C-CERAMIC,CHIP;1NF,10%,50V,X7R,2012 | |
| MC32,CC4 | | | |
| DC47L,47R | 2203-001550 | C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,20 | |
| DC18 | 2203-001551 | C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,20 | |
| DC1L,1R | 2203-001613 | C-CERAMIC,CHIP;24PF,0.25PF,50V,NPO, | |
| MC29,44 | 2203-001619 | C-CERAMIC,CHIP;27PF,5%,50V,NPO,2012 | |
| LC2 | 2301-000365 | C-FILM,PEF;1.5NF,10%,50V,5.5X7X2.8M | |
| AC12L,12R | 2303-000312 | C-FILM,PPF;100NF,5%,63V,7.5X12.5X3. | A1102-0164 |
| DC33,JC9L,9R,MC31 | 2401-000240 | C-AL;100UF,20%,10V,GP,6*11MM,5MM,TP | 11608-102-104 |
| RC12,CC1 | 2401-000303 | C-AL;100UF,20%,25V,GP,6.3*11,2.5MM, | 11608-104-104 |
| RC7 | 2401-000375 | C-AL;100UF,5%,100V,GP,10X20,5MM,TP | |
| DC20,22,34,MC7,9,23,LC9 | 2401-000419 | C-AL;10UF,20%,16V,GP,5X11,5,- | |
| QC1L,1R,FC4L,4R,MC12 | | | |
| LC8 | 2401-000438 | C-AL;10UF,20%,25V,GP,5*11,2MM, | 11608-104-103 |
| AC7,8,9,RC29 | 2401-000475 | C-AL;10UF,20%,50V,GP,5*11,2MM, | 11608-106-100 |
| MC40 | 2401-000795 | C-AL;220UF,20%,16V,GP,8X11.5,3.5MM, | |
| RC8 | 2401-000847 | C-AL;220UF,20%,35V,GP,10X12MM,5MM,T | 11608-105-221 |
| RC13,FC1 | 2401-000871 | C-AL;220UF,20%,50V,GP,10X16MM,5MM, | 11609-402-300 |
| FC14 | 2401-000907 | C-AL;22UF,20%,16V,GP,5*11,2MM, | 11608-103-223 |
| RC28,AC2L,2R,MC28 | 2401-001022 | C-AL;3.3UF,20%,50V,GP,5*11,2MM, | 11608-106-332 |
| JC12 | 2401-001164 | C-AL;33UF,20%,16V,GP,5*11,2MM, | 11608-103-333 |
| JC13,RC14 | 2401-001364 | C-AL;470UF,20%,16V,GP,10X12MM,5MM,T | 11608-103-471 |
| RC2 | 2401-001413 | C-AL;470UF,20%,35V,GP,10X20,5MM, | 11609-402-130 |
| DC6L,6R,25,RC25,27 | 2401-001465 | C-AL;47UF,20%,10V,GP,5*11,2MM, | 11608-102-473 |
| FC13,RC15 | 2401-001538 | C-AL;47UF,20%,25V,GP,6X11,2.5MM,- | |
| AC4L,4R | 2401-001572 | C-AL;47UF,20%,50V,GP,6.3*11,2.5MM, | 11608-106-470 |
| DC36L,36R | 2401-001645 | C-AL;680NF,20%,50V,GP,5*11,2MM, | 11608-106-688 |
| DC16,12,17 | 2401-001895 | C-AL;100UF,20%,16V,GP,6.3X11MM,2.5M | |
| DC13,RC24,MC18L,18R | 2401-001912 | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| MC17,20,25,RC9 | | | |
| JC8 | | | |
| RC11 | 2401-001928 | C-AL;2200UF,20%,35V,GP,16X31MM,7.5M | 11607-105-222 |
| RC10 | 2401-001942 | C-AL;3300UF,20%,35V,GP,18X35.5MM,7. | 11607-105-332 |
| MC19L,19R,JC2L,2R,RC23 | 2401-001954 | C-AL;4.7UF,20%,50V,GP,5X11MM,5,TP | |

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|---|---|---|---|
| DC11L,11R,JC7L,7R,5L,5R,4L,4R | | | |
| SC3L,3R,RC17,8L,8R | | | |
| OC1 | | | |
| KC1,MC21 | 2401-001968 | C-AL;470NF,20%,50V,GP,5X11MM,5,TP | |
| LC3,7,MC4,13,DC32 | 2401-001975 | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| AC6 | 2401-001994 | C-AL;3.3UF,20%,50V,BP,5*11MM,5MM,TP | 11608-206-339 |
| RC6 | 2401-002168 | C-AL;100UF,0.2,50V,GP,10X12.5,5MM,T | |
| AC5 | | | |
| AC10 | | | |
| FC5L,5R,DC21L,21R,26L | 2401-002180 | C-AL;2.2UF,0.2,50V,GP,5X11,5MM,TP | |
| DC26R,FC6L,6R,7L,7R | | | |
| FC8L,8R,9L,9R,FC1L,1R | | | |
| DC31L,31R,30L,30R,9L | | | |
| DC9R,38R | | | |
| DC10L,10R,14,35L,35R,38L | | | |
| RC4,5 | 2401-002258 | C-AL;4700UF,20%,50V,GP,22X40MM,5MM, | |
| CL1,FL1 | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM | 12429-411-100 |
| FL2L,2R | 2701-000177 | INDUCTOR-AXIAL;33UH,10%,2.5X3.4MM | 12429-211-330 |
| LL1 | 2701-000298 | INDUCTOR-AXIAL;470UH,10%,4.2X9.8MM | 12429-070-130 |
| MX1 | 2801-003152 | CRYSTAL-UNIT;7.2MHZ,20PPM,28-AAS,12 | |
| HX1 | 2802-000215 | RESONATOR-CERAMIC;19KHZ,+-38HZ,-,7. | 14539-504-100 |
| IFT5 | 2903-000148 | FILTER-CERAMIC;BP,450KHZ+-1KHZ | A1243-0049 |
| DLPF2L,2R | 2909-000210 | FILTER-LC;LP,-,1DB,30DB/19KHZ,50DB/ | 14529-414-050 |
| FB2L,2R,3,4 | 3301-000297 | CORE-FERRITE BEAD;AA,3.6X1.2X5.7MM, | 14049-033-420 |
| P/B DECK | 3708-000446 | CONNECTOR-FPC/FC/PIC;11P,1.5MM,STRA | B6010-1547 |
| R/P DECK | 3708-000447 | CONNECTOR-FPC/FC/PIC;13P,1.5MM,STRA | B6010-0399 |
| CCW1,2 | 3710-000541 | CONNECTOR-SOCKET;20P,-,1.25MM,STRAI | |
| FCW3 | 3711-000820 | CONNECTOR-HEADER;BOX,2P,1R,2.5MM,ST | 13349-512-561 |
| TP1,2,3,P/B HEAD | 3711-000903 | CONNECTOR-HEADER;BOX,3P,1R,2.5MM,ST | 13349-527-502 |
| R/P HEAD | 3711-001011 | CONNECTOR-HEADER;BOX,5P,1R,2.5MM,ST | 13349-103-053 |
| CCDW2 | 3711-001137 | CONNECTOR-HEADER;BOX,8P,1R,2MM, | 13349-119-080 |
| FCW6 | 3711-003110 | CONNECTOR-HEADER;BOX,4P,1R,2.5MM,ST | |
| | 3716-000198 | TERMINAL-BLOCK;NON SOLDER,3P,4MM,-, | A3059-0007 |
| MJ1 | 3716-000201 | TERMINAL-BLOCK;NON SOLDER,4P,4MM,-, | A3059-0006 |
| AJ1 | 3716-000204 | TERMINAL-BLOCK;NON SOLDER,4P,11MM,- | A3059-0017 |
| HJK1 | 3722-000363 | JACK-PHONE;9P,6.4MM,AU,BLK,- | A3040-0115 |
| AUX JACK | 3722-000377 | JACK-RCA;4P/2C,3.5MM,SN,BLK,#16~22 | A3040-0218 |
| AIC1 | 6003-000279 | SCREW-TAPTITE;BH,+,B,M3,L20,ZPC(YEL | 17448-130-201 |
| RQ1,3,RIC1,2,6,7,8,AIC1 | 6003-000283 | SCREW-TAPTITE;BH,+,B,M3,L8,ZPC(YEL) | 17458-130-081 |
| FIC9 | AH14-10003E | IC;KIA7812PI,-,TO-220 | |
| FIC3 | AH14-10004L | IC;NJU3718,SOP,BULK | |
| FIC6 | AH14-10006F | IC;TC9173P,DIP,EXPANDER 16P | |
| MIC2 | AH14-10007G | IC;LC72131,DIP,STICK PLL | |
| MIC1 | AH14-10007H | IC;LA1836,DIP,STICK IF+MPX | |
| MLPF1L,1R | AH26-10001A | TRANS-IF;FV-AD-BASE19K/38K,LOW PASS | 12450-304-040 |
| IFT4 | AH26-10001E | TRANS-IF;KS940228-09,-,-,7.6X12.0,- | 12619-030-005 |
| DLPF3L,3R,1L,1R | AH26-10002X | COIL-TRAP;KS940830-05,BIAS-TRAP,30D | 12429-206-102 |
| LL3 | AH26-10003C | COIL-TRAP;PCHNS-5371EQJ,BIAS-TRAP,- | 12619-577-771 |
| IFT6 | AH26-10020A | TRANS-DET;-,7KLL,DET,-,7.8MM,91PF,1 | |
| MCO1 | AH27-80060B | COIL-OSC;RBQ-07VB,393UH,MW/LW-RF | |

| Location No. | New Code No. | Description Specification | Old Code No. |
|---|---|---|---|
| AL1L,1R | AH27-90001A | COIL-SPRING;,2.2UH,-,-,SPRING | 12429-060-030 |
| REAR | AH31-10020A | FAN-DC;D0620B-12M,12VDC/0.16A, | A3070-0112 |
| FCW2 | AH39-20008M | LEAD-CONNECTOR ASS'Y;5264,5395,2P,1 | 13078-472-115 |
| FCW7 | AH39-20009C | LEAD-CONNECTOR ASS'Y;5264,5395,4P,1 | 13078-474-110 |
| R/P HEAD | AH39-20019C | LEAD-CONNECTOR ASS'Y;EHR,5264,5P,35 | 16439-0115-00 |
| FCW5 | AH39-20019M | LEAD-CONNECTOR ASS'Y;5051,5395,3P,2 | 16439-0124-00 |
| RCW1 | AH39-20514A | LEAD CONNECTOR-ASSY;-,5264,51088,10 | |
| P/B DECK | AH39-20517A | LEAD CONNECTOR-ASSY;-,5264,EHR-03,3 | |
| | AH39-50001N | LEAD-FASTEN;RING,1007#24,250MM,BLK | 13059-202-253 |
| JD2 | AH39-50030A | LEAD-PASTEN;-,1007#24,350MM,RED | |
| MAIN PCB | AH41-10401A | PCB-MAIN;MAX630,1L,PHENOL,330X247X1 | |
| RIC2,RQ1 | AH62-30060A | HEAT SINK-CD;AL,-,T1.0,-,-,-,SCM-70 | 15684-505-820 |
| RIC1 | AH62-30061B | HEAT SINK-,S;SCM6500,AL,-,EXTR,BLK, | 15684-507-530 |
| RQ3 | AH62-30064D | HEAT SINK;DAT7000,AL,-,ANODIZING,BL | 15684-509-730 |
| AIC1 | AH62-30105A | HEAT SINK-M;-,AL,-,T6.0,-,WHT,-,MAX | |
| | 2903-000102 | FILTER-CERAMIC;BP,10.7MHZ+-25KHZ | 14529-301-770 |
| | 2903-000105 | FILTER-CERAMIC;BP,10.7MHZ+-25KHZ | 14529-301-753 |
| | AH40-10025E | TUNER-FM;FTA4-460H,4G,75OHM | |
| | 2903-000148 | FILTER-CERAMIC;BP,450KHZ,+-1KHZ | |
| AH90-10722U | | ASSY-FRONT PCB;MAX632P,SEG | |
| UD1,3,4,5,6,7,8,9,10 UD11,13 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,5 | |
| UD2,22 | 0402-000125 | DIODE-RECTIFIER;1N4001,50V,1A,DO-41 | A4104-0001 |
| UD12 | 0402-000151 | DIODE-RECTIFIER;1N5392,100V,1.5A,DO | 12169-201-140 |
| UQ5,7,10,8 | 0501-000398 | TR-SMALL SIGNAL;KSC945-Y,NPN,250MW, | 12149-301-900 |
| UQ1,2,3,4,6,11,12 | 0504-000122 | TR-DIGITAL;KSR1009Y,NPN,300MW,4.7K, | 12159-301-790 |
| ULD3,4,5,18,19,20,21,22 ULD23,24,30 ULD7,6,9,10,12,13,15,16 | 0601-000141 | LED;ROUND,GRN,3.1MM,555NM | A4150-0290 |
| ULD1,2,8,11,14,17,29 ULD26,27 | 0601-000180 | LED;INVERTER,ORG,3MM,610NM | 12309-001-210 |
| ULD25,28 | 0601-000245 | LED;ROUND,RED,3.1MM,650NM | 12309-001-450 |
| UIC4 | 1204-000156 | IC-EQUALIZER;BA3834S,DIP,18P,-,PLAS | B4012-0447 |
| UR53 | 2001-000241 | R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X | 11018-877-152 |
| UR107,108,109,110 UR113,143 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-103 |
| UR23 | 2001-000302 | R-CARBON;10OHM,5%,1/8W,AA,TP,1.8X3. | 11018-877-100 |
| UR104,130,131,57 | 2001-000449 | R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X | 11018-877-222 |
| UR17 | 2001-000591 | R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X | 11018-877-332 |
| UR60,64,66 | 2001-000666 | R-CARBON;33OHM,5%,1/8W,AA,TP,1.8X3. | 11018-877-330 |
| UR100,101,132 | 2001-000786 | R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-473 |
| UR76 | 2001-000793 | R-CARBON;47OHM,5%,1/8W,AA,TP,1.8X3. | 11018-877-470 |
| UR74 | 2001-001006 | R-CARBON;82OHM,5%,1/8W,AA,TP,1.8X3. | 11018-877-820 |
| UR13,14,15,68 | 2007-000023 | R-CHIP;120OHM,5%,1/10W,DA,TP,2012 | 11119-201-121 |
| UR6,7,29,30,40,41,51,52 | 2007-000221 | R-CHIP;1.2KOHM,5%,1/10W,DA,TP,2012 | 11119-101-122 |
| UR8,31,42 | 2007-000241 | R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012 | 11119-101-152 |
| UR22,96,97,98 | 2007-000282 | R-CHIP;100KOHM,5%,1/10W,DA,TP,2012 | 11119-101-104 |
| UR69,71,72 | 2007-000290 | R-CHIP;100OHM,5%,1/10W,DA,TP,2012 | 11119-101-101 |
| UR55,56,95,129,135 UR136,137,138,139,140 | 2007-000300 | R-CHIP;10KOHM,5%,1/10W,DA,TP,2012 | 11119-101-103 |

| Location No. | New Code No. | Description Specification | Old Code No. |
|---|---|---|---|
| UR141,142,115,114,143 | | | |
| UR4 | 2007-000355 | R-CHIP;12KOHM,5%,1/10W,DA,TP,2012 | 11119-101-123 |
| UR75,61,63,65,67,70 | 2007-000401 | R-CHIP;150OHM,5%,1/10W,DA,TP,2012 | 11119-101-151 |
| UR77,78 | | | |
| UR11,12 | 2007-000449 | R-CHIP;180OHM,5%,1/10W,DA,TP,2012 | 11119-101-181 |
| UR21 | 2007-000457 | R-CHIP;18KOHM,5%,1/10W,DA,TP,2012 | 11119-101-183 |
| UR24,26,28,37,39,48,50 | 2007-000468 | R-CHIP;1KOHM,5%,1/10W,DA,TP,2012 | 11119-101-102 |
| UR5,99 | | | |
| UR32,43,9,124,125,126 | 2007-000493 | R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012 | 11119-101-222 |
| UR127,128,20,JW5 | | | |
| UR10,16,33,44 | 2007-000518 | R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012 | 11119-101-272 |
| UR105 | 2007-000565 | R-CHIP;220KOHM,5%,1/10W,DA,TP,2012 | 11119-101-224 |
| UR106 | 2007-000572 | R-CHIP;220OHM,5%,1/10W,DA,TP,2012 | 11119-101-221 |
| UR121 | 2007-000586 | R-CHIP;22KOHM,5%,1/10W,DA,TP,2012 | 11119-101-223 |
| UR1,34,45 | 2007-000686 | R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012 | 11119-101-332 |
| UR62 | 2007-000781 | R-CHIP;33OHM,5%,1/10W,DA,TP,2012 | A1020-0083 |
| UR2,18,35,46,79,80,81,82 | 2007-000872 | R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012 | 11119-101-472 |
| UR83,84,85,86,87,88,89 | | | |
| UR90,91,92,93,94 | | | |
| UR134,103,58 | | | |
| UR3,19,36,47 | 2007-001071 | R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012 | 11119-101-682 |
| UR25,27,38,49 | 2007-001201 | R-CHIP;820OHM,5%,1/10W,DA,TP,2012 | 11119-101-821 |
| UC25,26 | 2201-000223 | C-CERAMIC,DISC;12PF,5%,50V,NPO,5.0X | 11407-057-120 |
| UC13,14 | 2201-000423 | C-CERAMIC,DISC;27PF,5%,50V,NPO,5.0X | 11407-057-270 |
| UC1,2,3,4 | 2203-000199 | C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5 | |
| UC8 | 2203-000661 | C-CERAMIC,CHIP;270PF,5%,50V,NPO,201 | 11129-015-271 |
| UC6,7,9,10 | 2203-000953 | C-CERAMIC,CHIP;470PF,5%,50V,NPO,201 | 11129-004-471 |
| UC17,23,21 | 2203-000979 | C-CERAMIC,CHIP;47NF,10%,50V,X7R,201 | |
| UC18 | 2401-000240 | C-AL;100UF,20%,10V,GP,6*11MM,5MM,TP | 11608-102-104 |
| UC5,22 | 2401-000243 | C-AL;100UF,20%,10V,GP,6.3*5,2.5MM,T | 11608-152-101 |
| UC16,27,28,29 | 2401-000650 | C-AL;2.2UF,20%,50V,GP,3*5,1MM,TP | 11608-156-229 |
| UC12 | 2401-000752 | C-AL;220NF,20%,50V,GP,3*5,1MM,TP | 11608-106-228 |
| UC19 | 2409-000123 | C-EDL;47000UF,4UA,5.5V,-,-,5MM,BK | B1104-0540 |
| UX1 | 2801-001382 | CRYSTAL-UNIT;12MHZ,50PPM,28-AAM,10P | A1280-0017 |
| UX2 | 2801-001394 | CRYSTAL-UNIT;32.768KHZ,20PPM,28-AAY | 14539-502-350 |
| USW1,2,3,4,5,6,7,8 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X | 13559-901-100 |
| USW9,10,11,12,13,14,15,16 | | | |
| USW17,18,19,20,21,22,23,24 | | | |
| USW25,26,27,28,29,30,31 | | | |
| USW32,33,34,35,36,37,38 | | | |
| USW39,40,41,42,43,44,45 | | | |
| USW46,47,48,49 | | | |
| MAIN VR,MAGIC JOG | 3406-000162 | SWITCH-ROTARY;5V,50MA,SPDT,20MM | A3012-0018 |
| CCD2 | 3708-000307 | CONNECTOR-FPC/FC/PIC;7P,1.25MM,ANGL | B6010-0810 |
| CCD4 | 3708-000448 | CONNECTOR-FPC/FC/PIC;6P,1.25MM,STRA | B6010-1610 |
| CCD1 | 3708-000449 | CONNECTOR-FPC/FC/PIC;7P,1.25MM,STRA | B6010-1104 |
| CCD3 | 3708-000454 | CONNECTOR-FPC/FC/PIC;22P,1.25MM,STR | B6010-1500 |
| CCD5 | 3708-001027 | CONNECTOR-FPC/FC/PIC;6P,1.25MM,ANGL | |
| CCDW1,2 | 3711-002581 | CONNECTOR-HEADER;WALL,20P,1R,1.5MM, | |
| CCD1-2 | 3809-000180 | CABLE-FLAT;30V,80C,250MM,7P,1.25MM, | 16489-0010-00 |
| CCD4-5 | 3809-000199 | CABLE-FLAT;30V,80C,300MM,6P,1.25MM, | B6032-0072 |

| Location No. | New Code No. | Description Specification | Old Code No. |
|---|---|---|---|
| VFD | AH07-20002N | V.F.DISPLAY;SVA-16MM04,-,-,NAX630 | A4153-0114 |
| UIC1 | AH11-10002F | IC-MASK ROM;LC86P6232,-,DIP | B4000-0017 |
| UIC2 | AH14-10004L | IC;NJU3718,SOP,BULK | |
| UIC3 | AH14-10007C | IC;NJU3711M,SOP,STICK EXPANDER 8BIT | |
| DCW1 | AH39-20559X | LEAD CONNECTOR-ASSY;-,5264,51088,7P | |
| JW139UP | AH39-50001M | LEAD-FASTEN;RING,1007#24,350MM,BLK | 13059-201-353 |
| FRONT PCB | AH41-10403A | PCB-FRONT;MAX630,1L,PHENOL,297X247X | |
| REMOCON EYE | AH59-60001J | MODULE-REMOCON;GP1U271R,38KHZ,-,MES | B1294-0043 |
| FLT | AH61-20079A | HOLDER-FLT;ABS,94HB,BLK,-,MAX-380,- | 13322-0145-00 |
| UD18 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,5 | |
| UD21,UD18 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,5 | |

## AH90-10723B ASSY-POWER PCB;MAX632P,SGE

| | | | |
|---|---|---|---|
| UD22 | 0402-000125 | DIODE-RECTIFIER;1N4001,50V,1A,DO-41 | A4104-0001 |
| PC1,2 | 2201-000520 | C-CERAMIC,DISC;4.7NF,+80-20%,400VAC | 11469-501-070 |
| RF3,4,1 | 3601-000248 | FUSE-FERRULE;250V,2A,TIME LAG,GLASS | 14709-241-250 |
| RF1,3,4,5,6 | 3602-000147 | FUSE-CLIP;250V,7.5A,30MOHM | 113164-101-913 |
| PW1 | 3711-000190 | CONNECTOR-HEADER;1WALL,2P,1R,7.92MM | 13349-156-020 |
| PCW1 | 3711-000588 | CONNECTOR-HEADER;BOX,10P,1R,2.5MM,S | 13349-103-103 |
| FCW1 | 3711-000820 | CONNECTOR-HEADER;BOX,2P,1R,2.5MM,ST | 13349-512-561 |
| DPCW1 | 3711-003107 | CONNECTOR-HEADER;BOX,3P,1R,2.5MM,ST | |
| PL1,2 | AH27-10001F | COIL-CHOKE;27UH,K,Q30,-,-,DR(6.5*7. | 12429-010-330 |
| | 3601-000216 | FUSE-FERRULE;250V,2.5A,TIME LAG,GLA | 14709-441-262 |

## AH90-10723J ASSY-PRO LOGIC PCB;MAX632P,BWT

| | | | |
|---|---|---|---|
| DPD4,5,8,9,10,11 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,5 | |
| DPD2,3 | 0402-000125 | DIODE-RECTIFIER;1N4001,50V,1A,DO-41 | A4104-0001 |
| DPD1 | 0402-000450 | DIODE-BRIDGE;PBL403,200V,4.0A,DIP-4 | 12169-219-330 |
| DPZD2,3 | 0403-000398 | DIODE-ZENER;UZP8.2B,8.2V,7.7-8.7V,1 | 12169-403-600 |
| DPZD1 | 0403-000399 | DIODE-ZENER;UZP9.1B,9.1V,8.5-9.6V,1 | 12169-403-340 |
| DPQ1,2 | 0501-000407 | TR-SMALL SIGNAL;KSD471A-Y,NPN,800MW | 12149-401-150 |
| DPQ6 | 0504-000146 | TR-DIGITAL;KSR2004,PNP,300MW,47K-47 | 12159-301-760 |
| DPQ5,7 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47 | |
| DPQ4,3 | 0504-001003 | TR-DIGITAL;KSR2003,PNP,300MW,22K-22 | |
| DPIC6 | 1001-000111 | IC-ANALOG SWITCH;GD4066B,BILATERAL | |
| DPIC8,9,10 | 1201-000192 | IC-OP AMP;4558,SIP,9P,-,DUAL,20V/MV | 12119-401-630 |
| DPIC3 | 1201-000339 | IC-POWER AMP;4132,SIP,18P,-,DUAL,-, | A4010-0068 |
| DPIC2 | 1203-000110 | IC-NEGA.FIXED REG.;7912,TO-220,3P,- | 12109-401-700 |
| DPIC1 | 1203-000242 | IC-POSI.FIXED REG.;7812,TO-220,3P,- | 12109-401-690 |
| DPIC7 | 1204-001028 | IC-VOLUME CONTROL;LC7536,DIP,30P,27 | |
| DPIC4 | 1204-001158 | IC-DECODER;LV1015,DIP,24P,300MIL,PL | |
| DPIC5 | 1204-001159 | IC-DECODER;LA2786,DIP,42P,600MIL,PL | |
| DPR6 | 2001-000010 | R-CARBON;68KOHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-683 |
| DPR29,11 | 2001-000028 | R-CARBON(S);100OHM,5%,1/2W,AA,TP,2. | 11018-377-101 |
| DPR7,37,54L,54R,56,57 | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-103 |
| DPR8 | 2001-000319 | R-CARBON;120KOHM,5%,1/8W,AA,TP,1.8X | 11018-877-124 |
| DPR20,25,50,51,52 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3. | 11018-877-102 |
| DPXR1 | 2001-000435 | R-CARBON;1MOHM,5%,1/8W,AA,TP,1.8X3. | 11018-877-105 |
| DPR39,40,41 | 2001-000522 | R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-223 |
| DPR22,23 | 2001-000591 | R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X | 11018-877-332 |

| Location No. | New Code No. | Description Specification | Old Code No. |
|---|---|---|---|
| DPR5,38 | 2001-000702 | R-CARBON;39KOHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-393 |
| DPR21,24,SPR43L DPR43R | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X | 11018-877-472 |
| DPR32R,26,19 | 2001-000786 | R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-473 |
| DPR17,32 | 2001-000857 | R-CARBON;560OHM,5%,1/8W,AA,TP,1.8X3 | 11018-877-561 |
| DPR14,15 | 2001-001088 | R-CARBON(S);1KOHM,5%,1/2W,AA,TP,2.4 | 11018-377-102 |
| DPR13,12,28,30 | 2001-001093 | R-CARBON(S);2.2KOHM,5%,1/2W,AA,TP,2 | 11018-377-222 |
| DPR33,34 | 2001-001195 | R-CARBON(S);82OHM,5%,1/2W,AA,TP,2.4 | 11018-377-820 |
| DPR4 | 2003-000534 | R-METAL OXIDE(S);1KOHM,5%,1W,AA,TP, | 11048-477-102 |
| DPR1 | 2003-000593 | R-METAL OXIDE(S);22OHM,5%,3W,AA,TP, | 11048-677-220 |
| DPR3 | 2003-000614 | R-METAL OXIDE(S);27OHM,5%,1W,AA,TP, | 11048-477-270 |
| DPR2 | 2003-000616 | R-METAL OXIDE(S);27OHM,5%,2W,AA,TP, | 11048-577-270 |
| DPR9,10 | 2003-000689 | R-METAL OXIDE(S);4.7OHM,5%,1W,AA,TP | 11048-477-479 |
| DPC64,65 | 2201-000459 | C-CERAMIC,DISC;30PF,5%,50V,NPO,5.0X | 11407-057-300 |
| DPC1 | 2201-000520 | C-CERAMIC,DISC;4.7NF,+80-20%,400VAC | 11469-501-070 |
| DPC13C,13S | 2201-000557 | C-CERAMIC,DISC;470PF,10%,50V,SL,10. | 11407-018-471 |
| DPC60,66 | 2201-000783 | C-CERAMIC,DISC;100NF,+80%,-20%,50V, | 11417-104-104 |
| DPC84,85,86 | 2201-000914 | C-CERAMIC,DISC;100PF,10%,1KV | 11449-518-101 |
| DPC68 | 2202-000809 | C-CERAMIC,MLC-AXIAL;3.3NF,20%,16V,Y | 11447-619-332 |
| DPC46 | 2202-000825 | C-CERAMIC,MLC-AXIAL;680PF,10%,50V,Y | 11449-518-681 |
| DPC61 | 2301-000369 | C-FILM,PEF;1.8NF,5%,50V | |
| DPC19,22,37,38,50,51,16 | 2301-000375 | C-FILM,PEF;100NF,5%,50V,11X12.5X6.5 | 11505-713-104 |
| DPC7 | 2301-000383 | C-FILM,PEF;10NF,5%,50V,6X7X3.2MM,5M | |
| DPC56,58,43,45 | 2301-000389 | C-FILM,PEF;150NF,5%,50V,12.5X15X7.5 | 11505-713-154 |
| DPC27 | 2301-000415 | C-FILM,PEF;22NF,5%,50V,6.5X10.5X4M | |
| DPC18,21 | 2301-000475 | C-FILM,PEF;8.2NF,5%,50V,6.5X12X3.5 | |
| DPC28 | 2301-000449 | C-FILM,PEF;47NF,10%,50V,8X11X4.5MM, | |
| DPC69,70 | 2301-000476 | C-FILM,PEF;82NF,10%,50V,10.5X12.5X6 | 11505-714-823 |
| DPC14,26,10 | 2401-000325 | C-AL;100UF,20%,35V,GP,8*11.5,3.5MM, | 11608-105-101 |
| DPC33,32,30,31,47,72,73,74 | 2401-000419 | C-AL;10UF,20%,16V,GP,5X11,5,- | |
| DPC15,23,24 | 2401-000475 | C-AL;10UF,20%,50V,GP,5*11,2MM, | 11608-106-100 |
| DPC34,29,67,5 | 2401-000795 | C-AL;220UF,20%,16V,GP,8X11.5,3.5MM, | |
| DPC63 | 2401-001080 | C-AL;330NF,20%,50V,GP,5*11,2MM, | 11608-106-338 |
| DPC11,25,9,8 | 2401-001552 | C-AL;47UF,20%,35V,GP,6.3*11,2.5MM, | 11608-105-470 |
| DPC62 | 2401-001889 | C-AL;100NF,20%,50V,GP,5X11MM,2MM,BK | |
| DPC36,35 | 2401-001912 | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| DPC2,3 | 2401-001942 | C-AL;3300UF,20%,35V,GP,18X35.5MM,7. | 11607-105-332 |
| DPC53,55,42,40,77L,77R DPC76L,76R,DPC82S DPC81S,79S,80S,82C, DPC81C,79C DPC80C,DPC4,6 | 2401-001954 | C-AL;4.7UF,20%,50V,GP,5X11MM,5,TP | |
| DPC54,39,41,71,52,48 | 2401-001968 | C-AL;470NF,20%,50V,GP,5X11MM,5,TP | |
| DPC78,75,49 | 2401-001975 | C-AL;47UF,20%,16V,GP,5X11MM,5,TP | |
| DPC57,44 | 2401-001022 | C-AL;3.3UF,20%,50V,GP,5*11.2MM,TP | 11608-206-339 |
| DPC59,12S,12C | 2401-002180 | C-AL;2.2UF,0.2,50V,GP,5X11,2MM,TP | |
| DPX1 | 2802-000192 | RESONATOR-CERAMIC;8MHZ,0.5%,BK,10.0 | |
| DPW5 | 3711-000588 | CONNECTOR-HEADER;BOX,10P,1R,2.5MM,S | 13349-103-103 |
| DPW4 | 3711-003108 | CONNECTOR-HEADER;BOX,7P,1R,2.5MM,ST | |
| DPW2 | 3722-000398 | JACK-RCA;3P/2C,3.5MM,SN,BLK,#16~22 | A3040-0069 |
| DPW1 | 3722-001011 | JACK-RCA;2P,3.5MM,NI,BLK,- | |

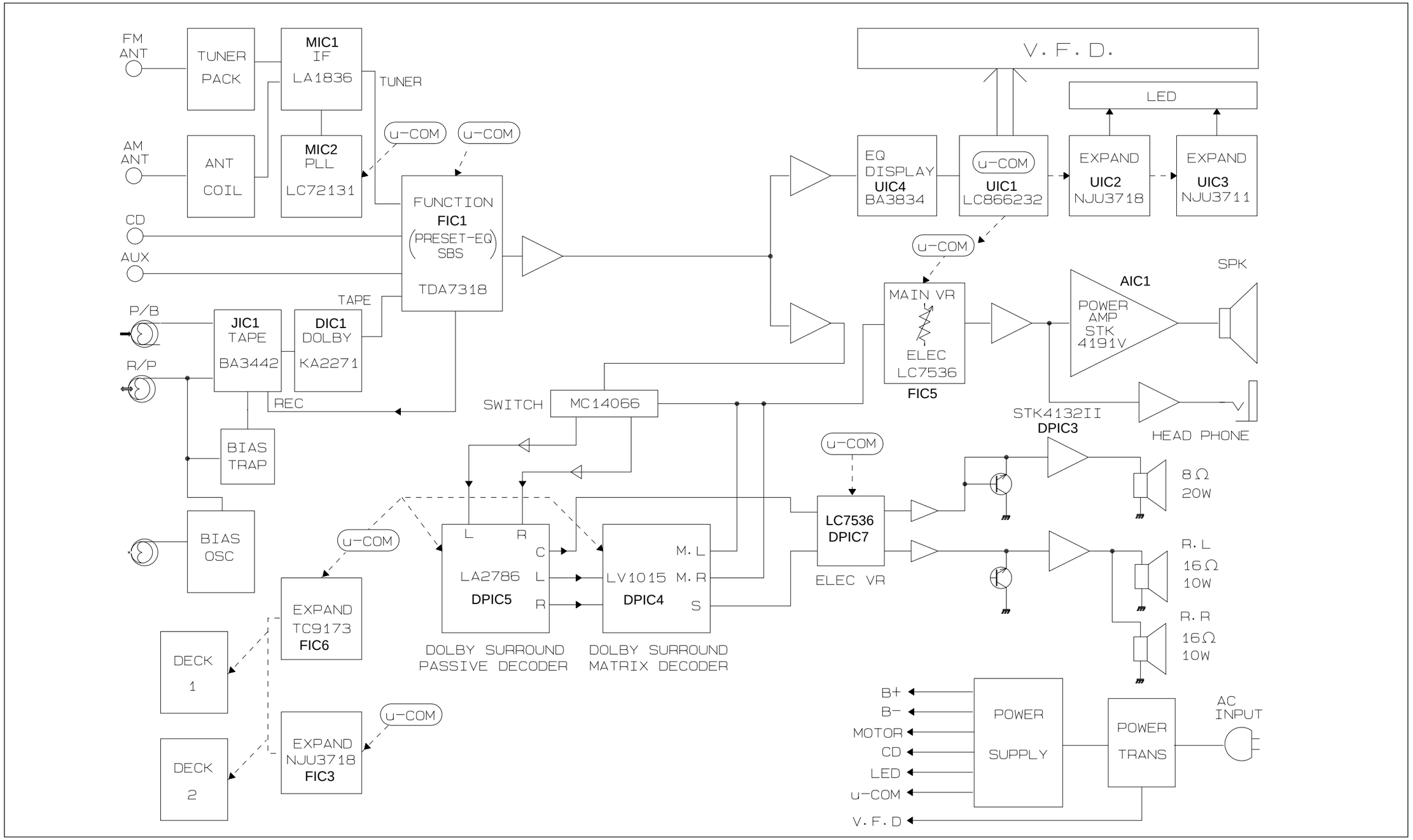
| Location No. | New Code No. | Description Specification | Old Code No. |
|---|---|---|---|
| DPR55L,55R | 61048-177-333 | R-CARBON;RD 1/8 T 333-J | |
| DPR18,50,16,31 | 61048-177-563 | R-CARBON;RD 1/8 T 563-J | |
| DPR44L,44R | | | |
| DPL1,2 | AH27-90001A | COIL-SPRING;,2.2UH,-,-,SPRING | 12429-060-030 |
| DPW3 | AH39-20559Y | LEAD CONNECTOR-ASSY;-,5264,51088,3P | |
| H/P MUTE | AH61-40022A | STUD-TAP;SPC1,T0.5,BT2,-,-, | 13124-100-710 |
| DPIC1,2 | AH62-30061B | HEAT SINK-,S;SCM6500,AL,-,EXTR,BLK, | 15684-507-530 |
| DPIC3 | AH62-30121A | HEAT SINK-PRO;-,AL,-,T6.0,-,WHT,-,M | |
| | G3A8-3VI/C | ASSY CD PACK C.K.D;G3A8 | |
| | 3809-000169 | CABLE-FLAT;30V,80C,150MM,12P,1.25MM | A6032-0068 |
| | A6032-0088 | WIRE-PLATE;22/250 UL2896-AP-1.25-22 | |
| | AH90-10346M | ASSY-PCB CD MAIN;G3A8,CKD | |
| | 0202-000152 | SOLDER-WIRE FLUX;SV92-8SA,S92,-,92S | 10849-740-121 |
| | 0202-000155 | SOLDER-WIRE FLUX;KR19-RMA S60A,S60A | A0074-0003 |
| ND200,201,202,203 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200MA,5 | |
| NZD101 | 0403-000361 | DIODE-ZENER;UZ6.2BSB,6.2V,5.99-6.24 | 12169-404-800 |
| NQ1502 | 0501-000323 | TR-SMALL SIGNAL;KSB564Y,PNP,800MW,T | 12149-202-050 |
| NQ1501 | 0501-000610 | TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO | |
| NIC9282 | 0904-000157 | IC-DSP;9282,-,QFP,80P,-,16.9344MHZ, | A4012-0291 |
| NIC9258 | 1003-000179 | IC-MOTOR DRIVER;KA9258D,SOP,28P,-,S | |
| NIC9270 | 1204-000110 | IC-AUDIO FILTER;KA9270,SOP,20P,-,PL | A4012-0089 |
| NIC9220 | 1204-001041 | IC-ASP;KA9220B,QFP,80P,-,PLASTIC,6V | |
| NR605 | 2007-000001 | R-CHIP;68KOHM,5%,1/10W,DA,TP,2012 | 11119-101-683 |
| NR606,611,608,609,610 | 2007-000029 | R-CHIP;0OHM,5%,1/10W,DA,TP,2012 | 11119-101-000 |
| NR47L,47R,104,203,NRD | 2007-000282 | R-CHIP;100KOHM,5%,1/10W,DA,TP,2012 | 11119-101-104 |
| NR106,107 | 2007-000338 | R-CHIP;120KOHM,5%,1/10W,DA,TP,2012 | 11119-101-124 |
| NR41L,41R,204,191,100 | 2007-000355 | R-CHIP;12KOHM,5%,1/10W,DA,TP,2012 | 11119-101-123 |
| NR190 | | | |
| NR103,119 | 2007-000395 | R-CHIP;150KOHM,5%,1/10W,DA,TP,2012 | 11119-101-154 |
| NR110 | 2007-000409 | R-CHIP;15KOHM,5%,1/10W,DA,TP,2012 | 11119-101-153 |
| NR115 | 2007-000444 | R-CHIP;180KOHM,5%,1/10W,DA,TP,2012 | 11119-101-184 |
| NR102,109,205,45L,45R | 2007-000468 | R-CHIP;1KOHM,5%,1/10W,DA,TP,2012 | 11119-101-102 |
| NR42L,42R,114 | 2007-000477 | R-CHIP;1MOHM,5%,1/10W,DA,TP,2012 | 11119-101-105 |
| NR40L,40R | 2007-000586 | R-CHIP;22KOHM,5%,1/10W,DA,TP,2012 | 11119-101-223 |
| NR101 | 2007-000593 | R-CHIP;22OHM,5%,1/10W,DA,TP,2012 | 11119-101-220 |
| NR43L,43R,200 | 2007-000653 | R-CHIP;27KOHM,5%,1/10W,DA,TP,2012 | 11119-101-273 |
| NR201,202 | 2007-000686 | R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012 | 11119-101-332 |
| NR105 | 2007-000830 | R-CHIP;39KOHM,5%,1/10W,DA,TP,2012 | 11119-101-393 |
| NR44L,44R,46L,46R | 2007-000872 | R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012 | 11119-101-472 |
| NR117 | 2007-000898 | R-CHIP;430KOHM,5%,1/10W,DA,TP,2012 | 11119-101-434 |
| NR111,108 | 2007-000941 | R-CHIP;47KOHM,5%,1/10W,DA,TP,2012 | 11119-101-473 |
| NR112 | 2007-001039 | R-CHIP;56KOHM,5%,1/10W,DA,TP,2012 | 11119-101-563 |
| NR113 | 2007-001177 | R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012 | 11119-101-822 |
| NR116 | 2007-001195 | R-CHIP;820KOHM,5%,1/10W,DA,TP,2012 | 11119-101-824 |
| NR118 | 2007-001213 | R-CHIP;82OHM,1%,1/10W,DA,TP,2012 | 11119-102-820 |
| NR555 | 2008-000141 | R-FUSIBLE;2.2OHM,5%,1/4W,AA,TP,2.6X | 11058-277-229 |
| NVR1701 | 2103-000007 | VR-SEMI;50KOHM,30%,1/10W,SIDE | 11249-102-063 |
| NVR1702,1703,1704 | 2103-000291 | VR-SEMI;20KOHM,30%,1/10W,SIDE | 11249-102-043 |

| Location No. | New Code No. | Description Specification | Old Code No. |
|---|---|---|---|
| NC119,120,121,107,108 NC603 | 2203-000199 | C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5 | |
| NC205,110,116,102,103 43R,44L,500,600,601,602 | 2203-000260 | C-CERAMIC,CHIP;10NF,10%,50V,X7R,201 | 11129-004-103 |
| NC1000,1001 | 2203-000363 | C-CERAMIC,CHIP;150PF,5%,50V,NPO,201 | |
| NC112 | 2203-000495 | C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,20 | 11129-004-222 |
| NC118 | 2203-000787 | C-CERAMIC,CHIP;330PF,5%,50V,NPO,201 | |
| NC113,125,101 | 2203-000802 | C-CERAMIC,CHIP;33NF,10%,50V,X7R,201 | 11129-001-333 |
| NC100 | 2203-000892 | C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,20 | |
| NC204,124 | 2203-000919 | C-CERAMIC,CHIP;470NF,+80-20%,16V,Y5 | |
| NC200 | 2203-000979 | C-CERAMIC,CHIP;47NF,10%,50V,X7R,201 | |
| NC2000 | 2203-001026 | C-CERAMIC,CHIP;4PF,0.25PF,50V,SL,20 | |
| NC45R,46L | 2203-001058 | C-CERAMIC,CHIP;560PF,5%,50V,NPO,201 | 11129-019-561 |
| NC111 | 2203-001105 | C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,20 | 11129-004-682 |
| NC115 | 2203-001137 | C-CERAMIC,CHIP;68NF,+80-20%,50V,Y5V | 11129-004-683 |
| NC190 | 2203-001256 | C-CERAMIC,CHIP;8PF,0.25PF,50V,NPO,2 | |
| NC109,104,42R,43L | 2203-001537 | C-CERAMIC,CHIP;1NF,10%,50V,X7R,2012 | |
| NC41L,41R | 2203-001550 | C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,20 | |
| NC201 | 2203-001551 | C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,20 | |
| NC202,203 | 2203-001619 | C-CERAMIC,CHIP;27PF,5%,50V,NPO,2012 | |
| NC702,105 | 2401-000243 | C-AL;100UF,20%,10V,GP,6.3*5,2.5MM,T | 11608-152-101 |
| NC114 | 2401-000419 | C-AL;10UF,20%,16V,GP,5X11,5,- | |
| NC703 | 2401-000778 | C-AL;220UF,20%,10V,GP,6.3X11,2.5MM, | 11608-102-224 |
| NC700,701 | 2401-000868 | C-AL;220UF,20%,4V,GP,6.3*5,2.5MM,TP | 11608-171-221 |
| NC44R,45L,40L,40R,122 | 2401-001238 | C-AL;4.7UF,20%,25V,GP,3*5,1MM,TP | 11608-154-479 |
| NC42L | 2401-001502 | C-AL;47UF,20%,16V,GP,6.3*5,2.5MM,TP | 11608-153-470 |
| NC117 | 2401-001968 | C-AL;470NF,20%,50V,GP,5X11MM,5,TP | |
| NL100 | 2703-000002 | INDUCTOR-SMD;100UH,10%,2.5X3.2X2MM | 11176-600-040 |
| NXF100 | 2802-000211 | RESONATOR-CERAMIC;16.93MHZ,0.5%,TP, | 14539-503-083 |
| NS100 | 3409-000174 | SWITCH-LEAF;16VDC,500MA,10GF,SPST | 13564-601-100 |
| NCW100 | 3708-000177 | CONNECTOR-FPC/FC/PIC;16P,1.0MM,ANGL | A6010-1523 |
| NCW103 | 3708-000412 | CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANG | A6010-1526 |
| NCW101 | 3711-001136 | CONNECTOR-HEADER;BOX,8P,1R,2MM,ANGL | 13349-139-080 |
| | 3809-000202 | CABLE-FLAT;30V,80C,82MM,16P,1MM,UL2 | A6032-0066 |
| NIC05 | AC14-12001G | IC;KA78L05,T,- | |
| | AH62-30047A | HEAT SINK;ETHD,-,T0.5,-,-,-,MAX-555 | 11124-0061-00 |
| | AH63-40017A | SHIELD-PLATE;SPTE,T0.3,-,MM-77,-, | 12074-0024-00 |
| | AH90-10719E | ASSY-PCB;G3A8-3VI/C,NEW | |
| SZD1 | 0403-000352 | DIODE-ZENER;UZ4.7BM,4.7V,4.4-5.0V,5 | 12169-403-200 |
| SZD2 | 0403-000361 | DIODE-ZENER;UZ6.2BSB,6.2V,5.99-6.24 | 12169-404-800 |
| SIC1,2 | 1003-000298 | IC-MOTOR DRIVER;LB1641,SIP,10P,-,- | |
| SR4 | 2001-000028 | R-CARBON(S);100OHM,5%,1/2W,AA,TP,2. | 11018-377-101 |
| SR1,2,5 | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3. | 11018-877-102 |
| SR3 | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X | 11018-877-472 |
| SC5,6,7 | 2201-000163 | C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V | 11417-344-103 |
| SC1,2,3,4 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5 | |
| SC11 | 2401-000240 | C-AL;100UF,20%,10V,GP,6*11MM,5MM,TP | 11608-102-104 |
| SC8,9 | 2401-000795 | C-AL;220UF,20%,16V,GP,8X11.5,3.5MM, | |
| SC10 | 2401-001912 | C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK | |
| SL1 | 2701-000177 | INDUCTOR-AXIAL;33UH,10%,2.5X3.4MM | 12429-211-330 |

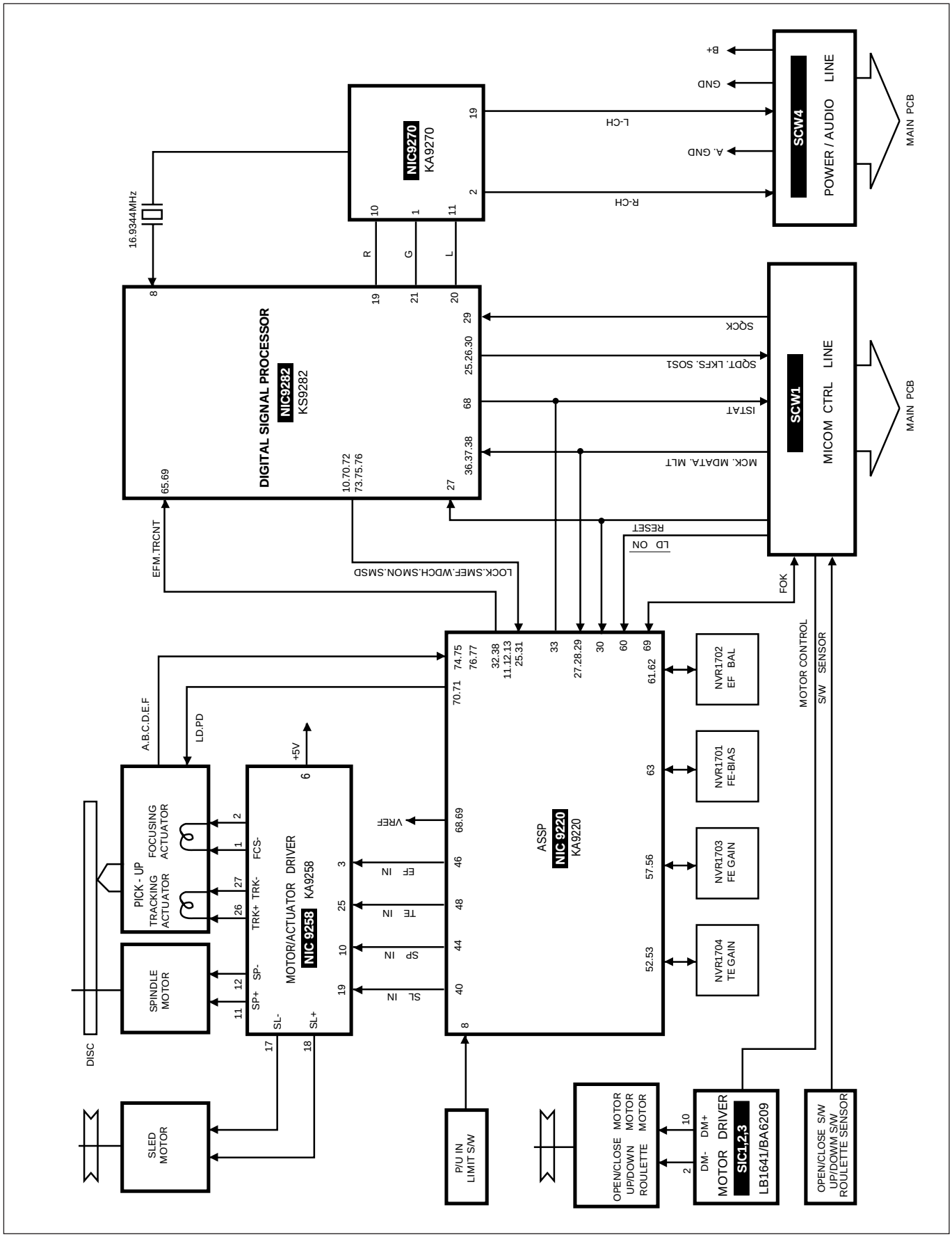
| Location No. | New Code No. | Description Specification | Old Code No. |
|---|---|---|---|
| SCW2 | 3708-000507 | CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANG | |
| | 3708-001131 | CONNECTOR-FPC/FC/PIC;5P,1.25MM,STRA | |
| SCW1 | 3711-002579 | CONNECTOR-HEADER;WALL,22P,1R,2.5MM, | |
| | 3711-003379 | CONNECTOR-HEADER;NOWALL,3P,1R,2.5MM | |
| SIC3 | AC14-12001G | IC;KA78L05,T,- | |
| SCW4 | AH39-20025S | LEAD-CONNECTOR,ASSY;-,51004-08,3502 | 16439-0291-00 |
| SCW3 | AH39-20025T | LEAD-CONNECTOR,ASSY;-,51004-08,3502 | 16439-0292-00 |

# 9. Block Diagrams

## 9-1 Main



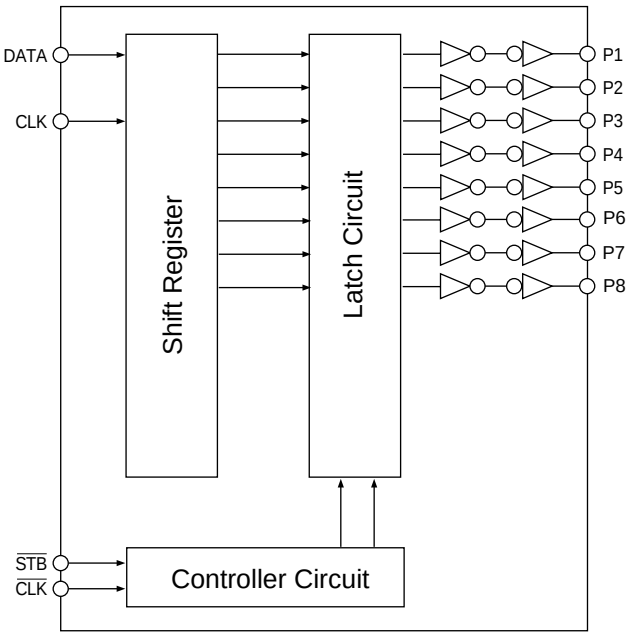
# 9-2 CD


B+
GND
A. GND
L-CH
R-CH
SCW4
POWER / AUDIO LINE
MAIN PCB
NIC9270
KA9270
16.9344MHz
R
G
L
DIGITAL SIGNAL PROCESSOR
NIC9282
KS9282
SQCK
SQDT. LKFS. SOS1
ISTAT
MCK. MDATA. MLT
SCW1
MICOM CTRL LINE
MAIN PCB
RESET
LD ON
FOK
EFM.TRCNT
LOCK.SMEF.WDCH.SMON.SMSD
MOTOR CONTROL
S/W SENSOR
A.B.C.D.E.F
LD.PD
+5V
VREF
ASSP
NIC 9220
KA9220
NVR1702
EF BAL
NVR1701
FE-BIAS
NVR1703
FE GAIN
NVR1704
TE GAIN
PICK - UP
TRACKING ACTUATOR
FOCUSING ACTUATOR
MOTOR/ACTUATOR DRIVER
NIC 9258
KA9258
FCS-
TRK+ TRK-
SP+ SP-
SL+ SL-
FE IN
TE IN
SP IN
SL IN
SPINDLE MOTOR
SLED MOTOR
DISC
P/U IN
LIMIT S/W
OPEN/CLOSE MOTOR
UP/DOWN MOTOR
ROULETTE
MOTOR DRIVER
SIC1213
LB1641/BA6209
DM+
DM-
OPEN/CLOSE S/W
UP/DOWN S/W
ROULETTE SENSOR

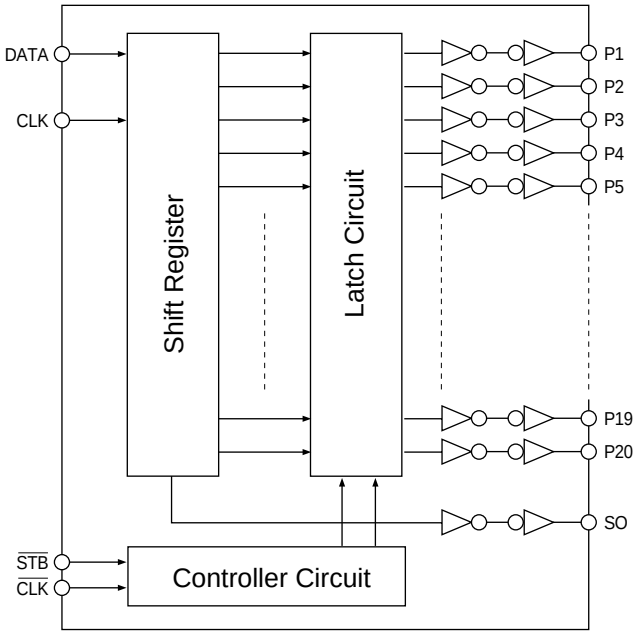
# 9-3 IC & TR Internal Diagrams

## 9-3-1 Main

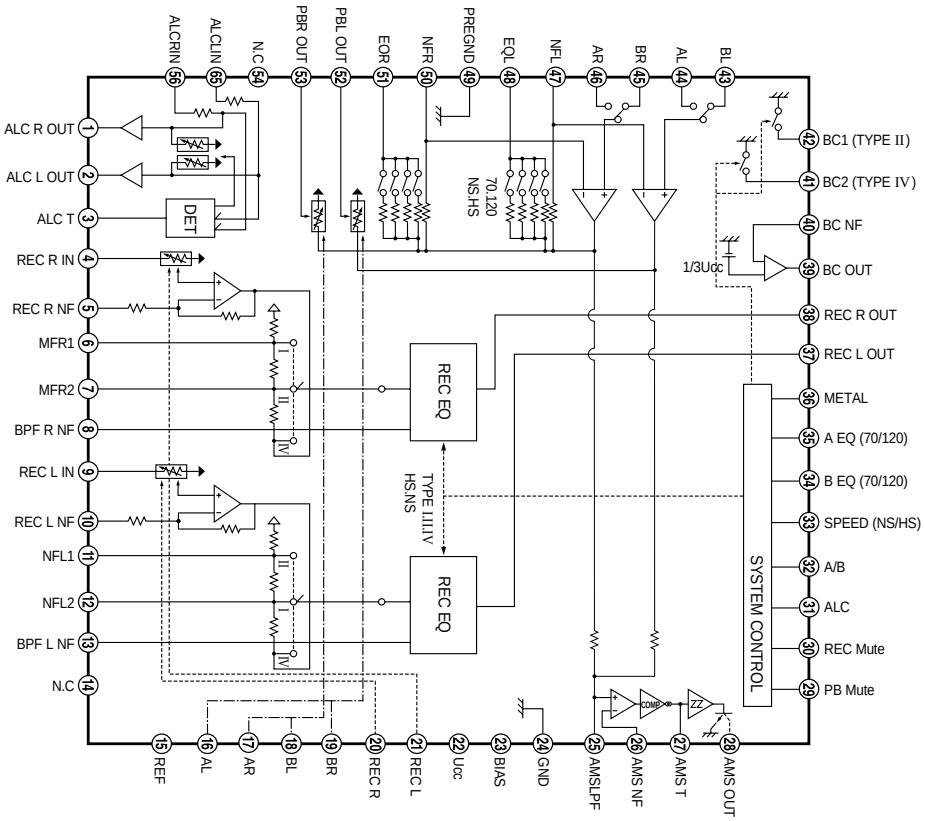
NJU3711 : UIC3



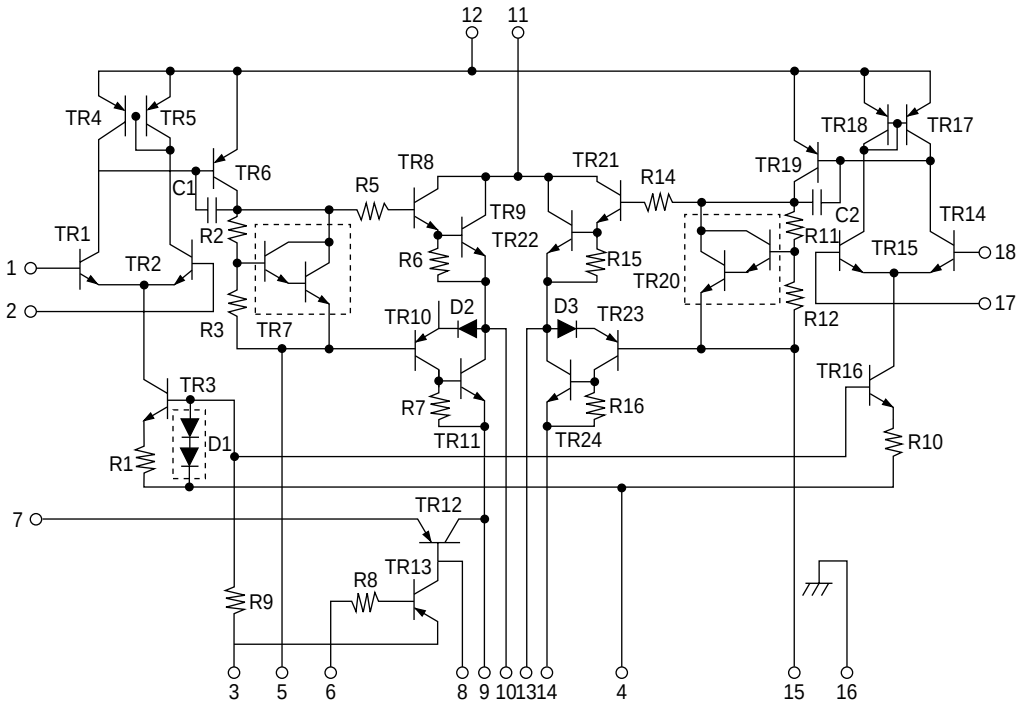

NJU3718 : UIC2,FIC3



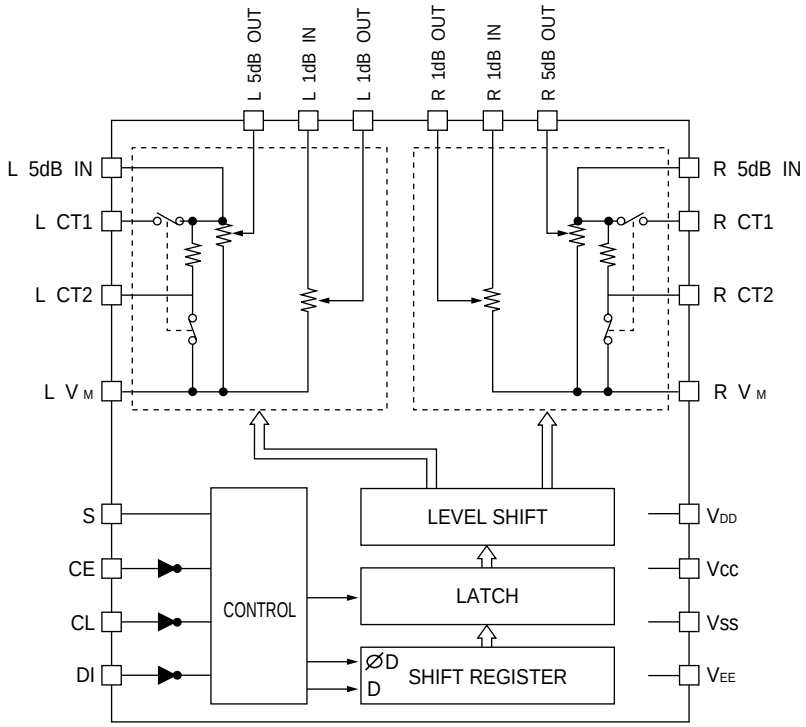
## BA3442AKS : JIC1



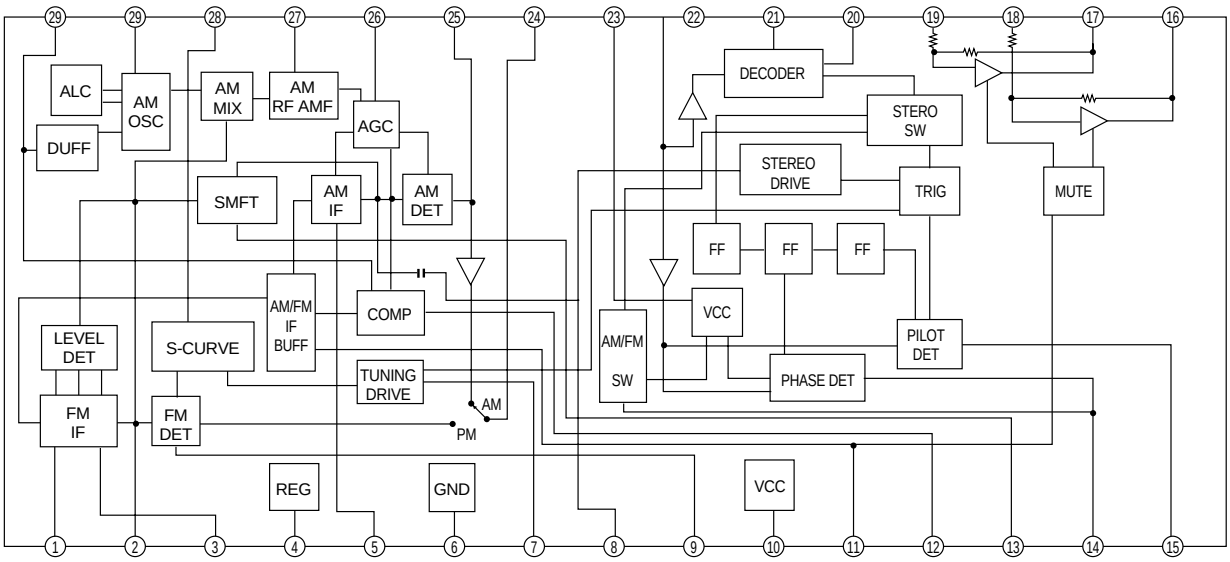

## STK4191V : AIC1



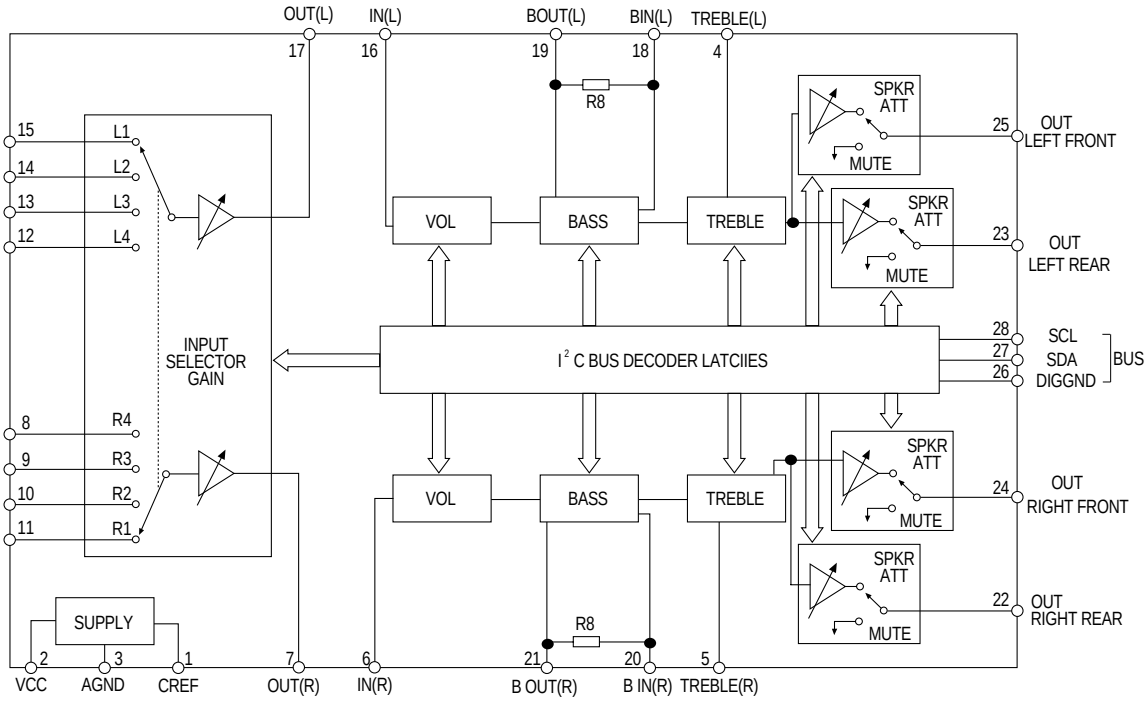
LC7536 : FIC5



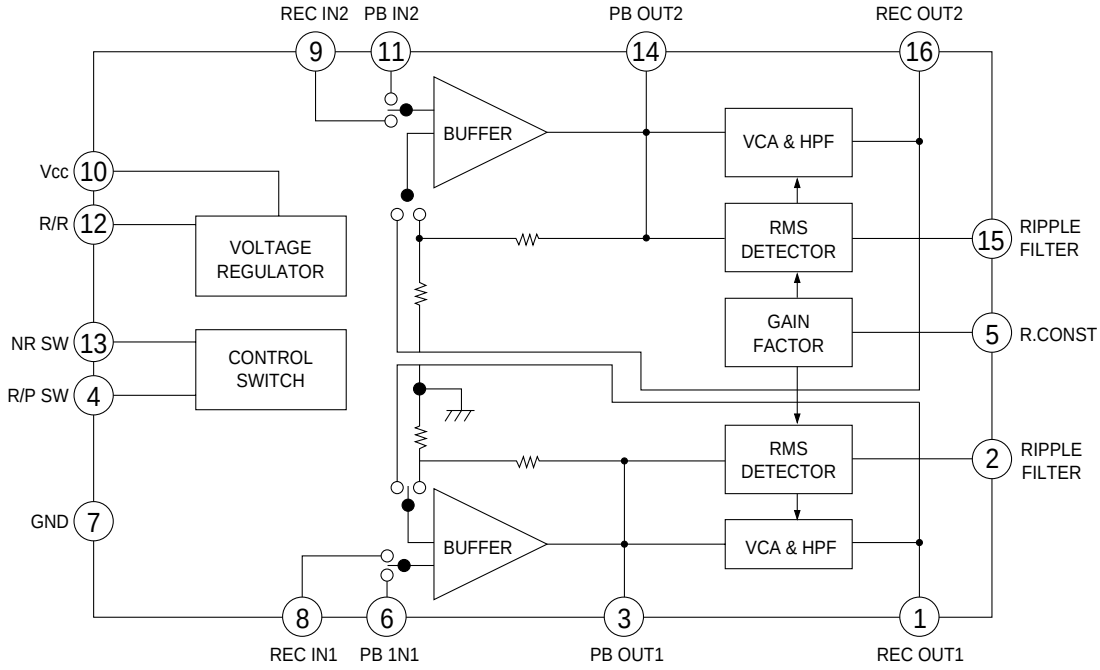

LA1836 : MIC1



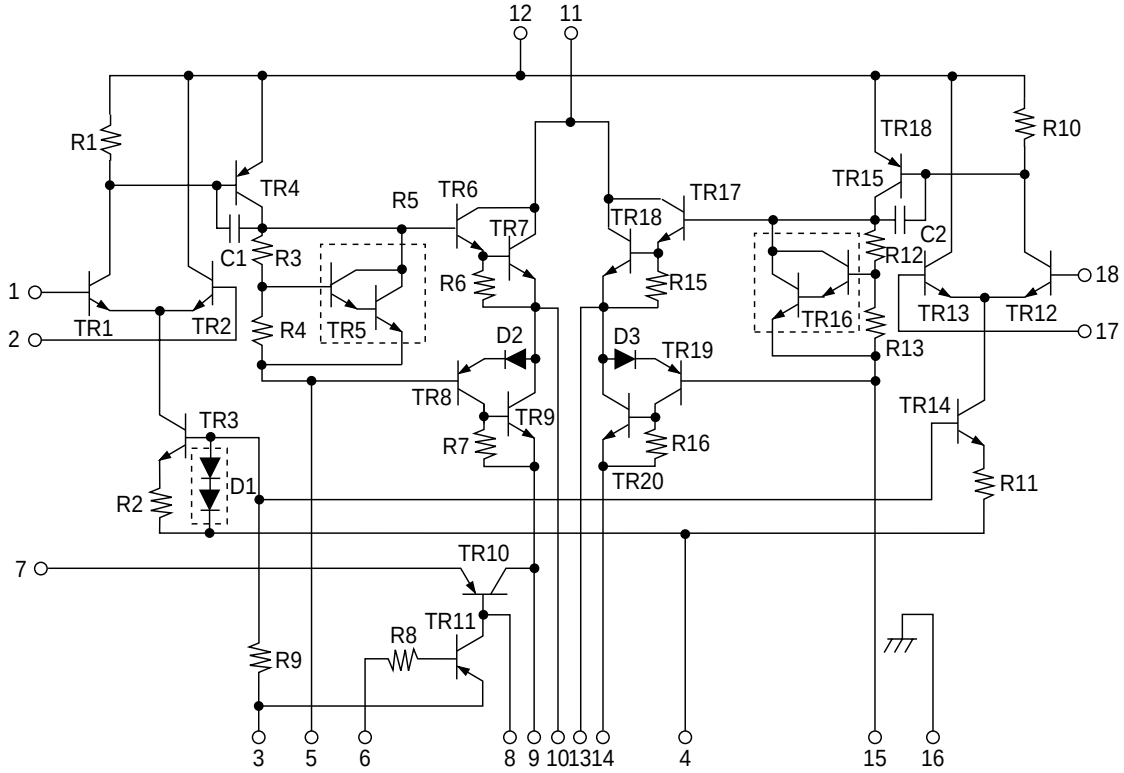
TDA7318 : FIC1



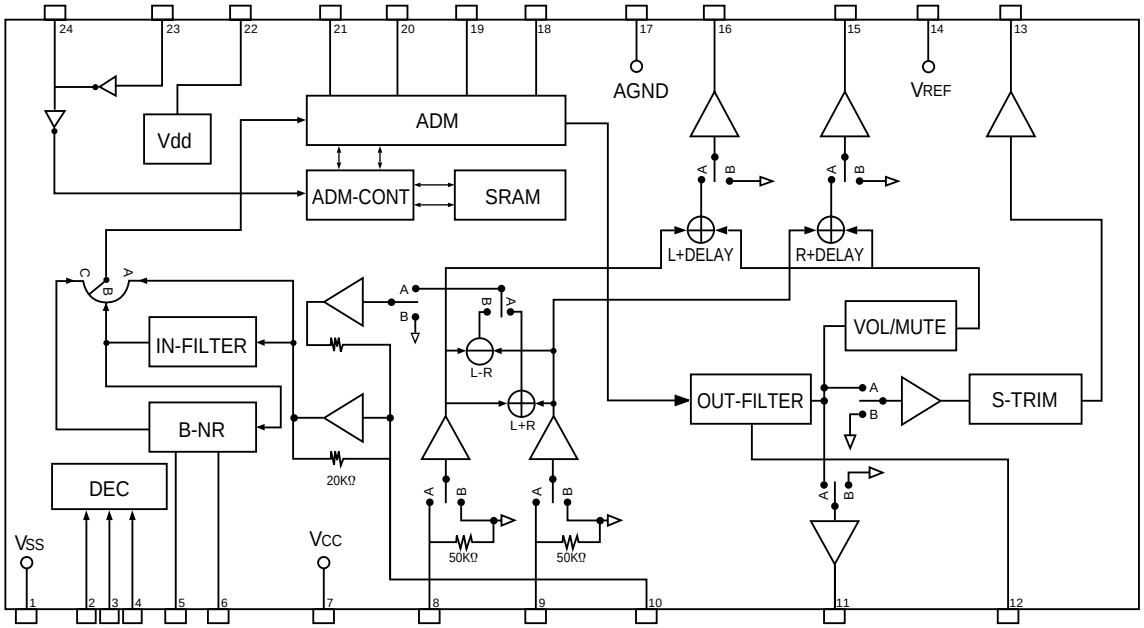

KA2271B : DIC1



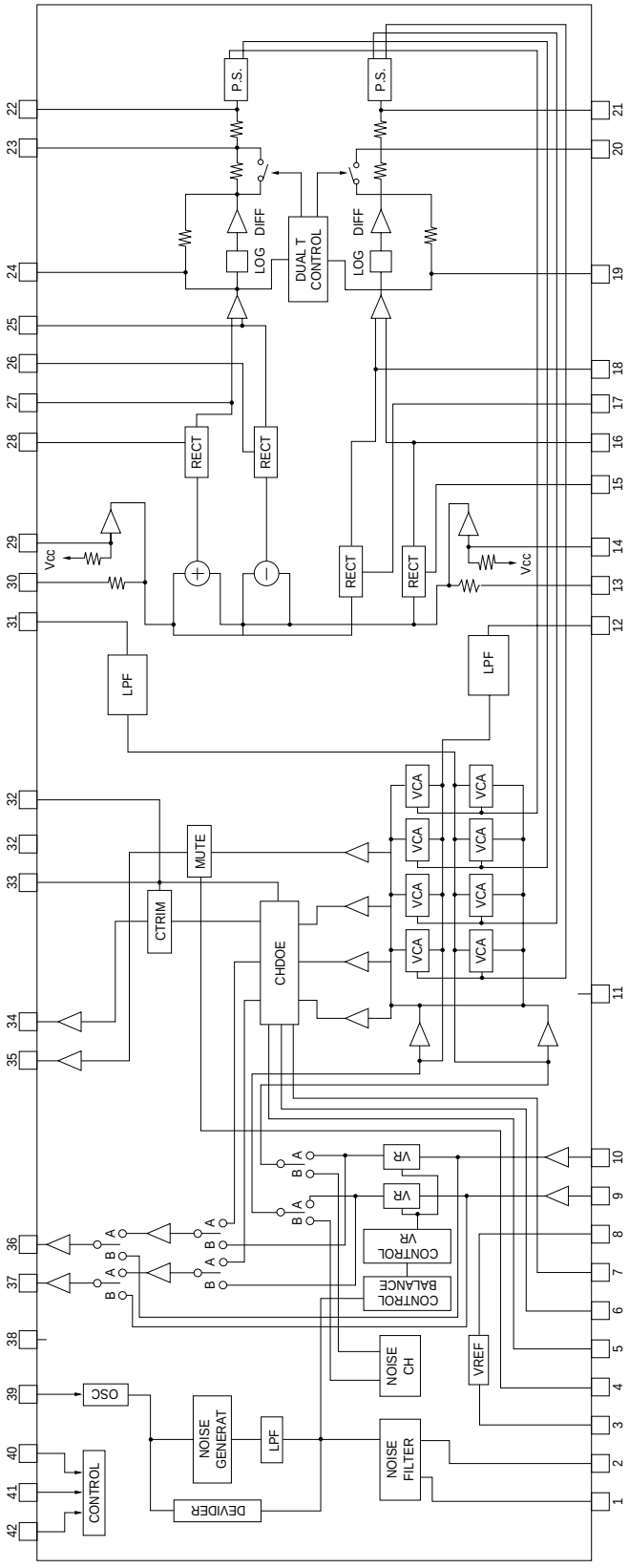
STK4132II: DPIC3



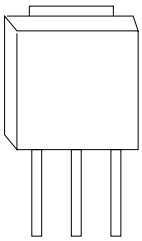

LV1015: DPIC4



LA2786: DPIC5



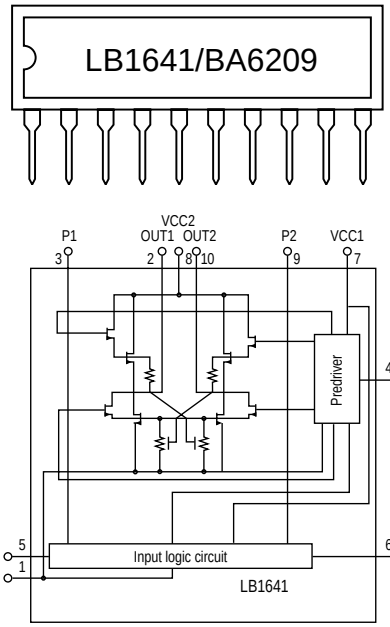
## 9-3-2 CD



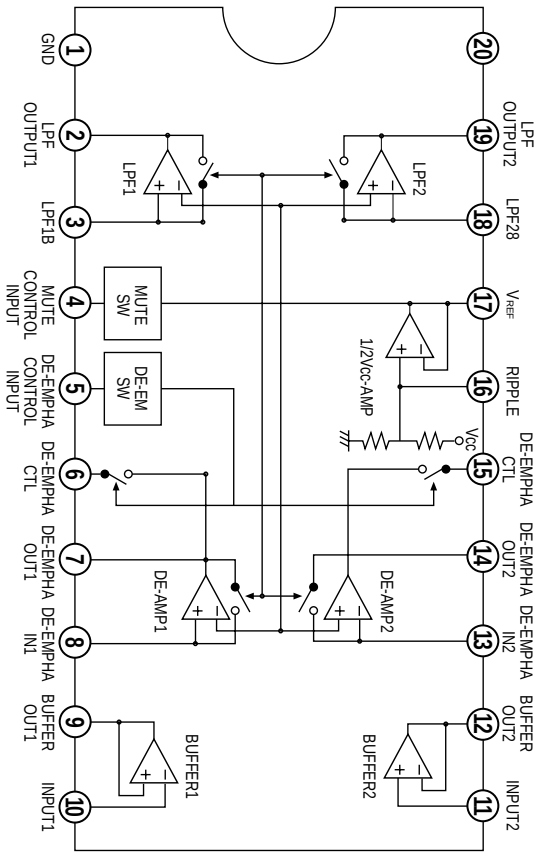
| TR | 1 | 2 | 3 |
|---|---|---|---|
| KSR1003<br>A928 | E | C | B |

* NOTE : KSB564 = 'EBC' TYPE

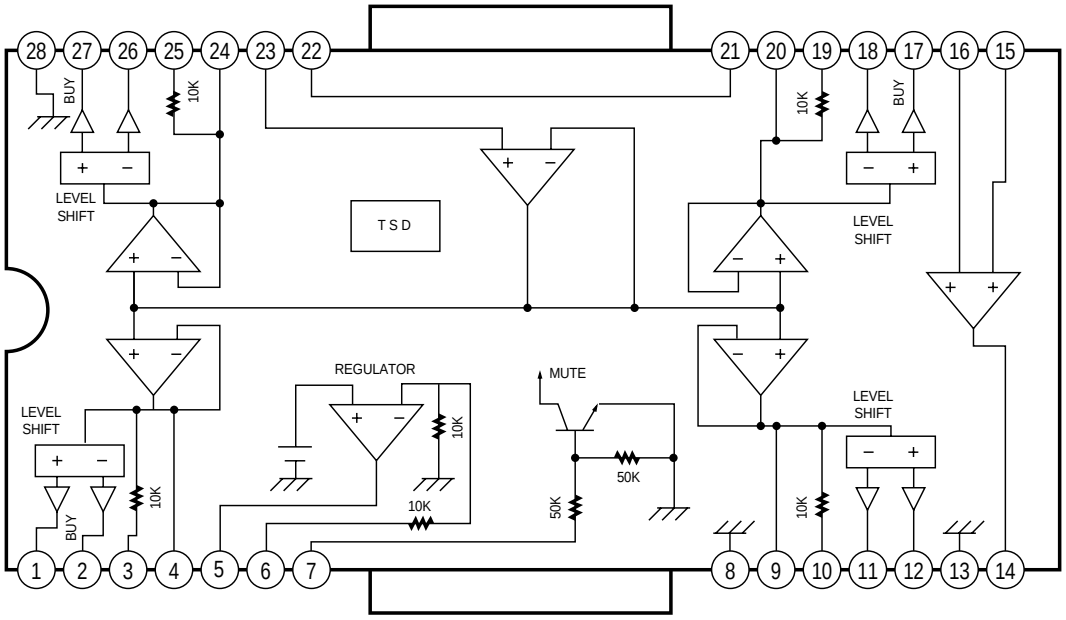
LB1641/BA6209(MOTOR DRIVER) : SIC1,SIC2,SIC3,NIC1641



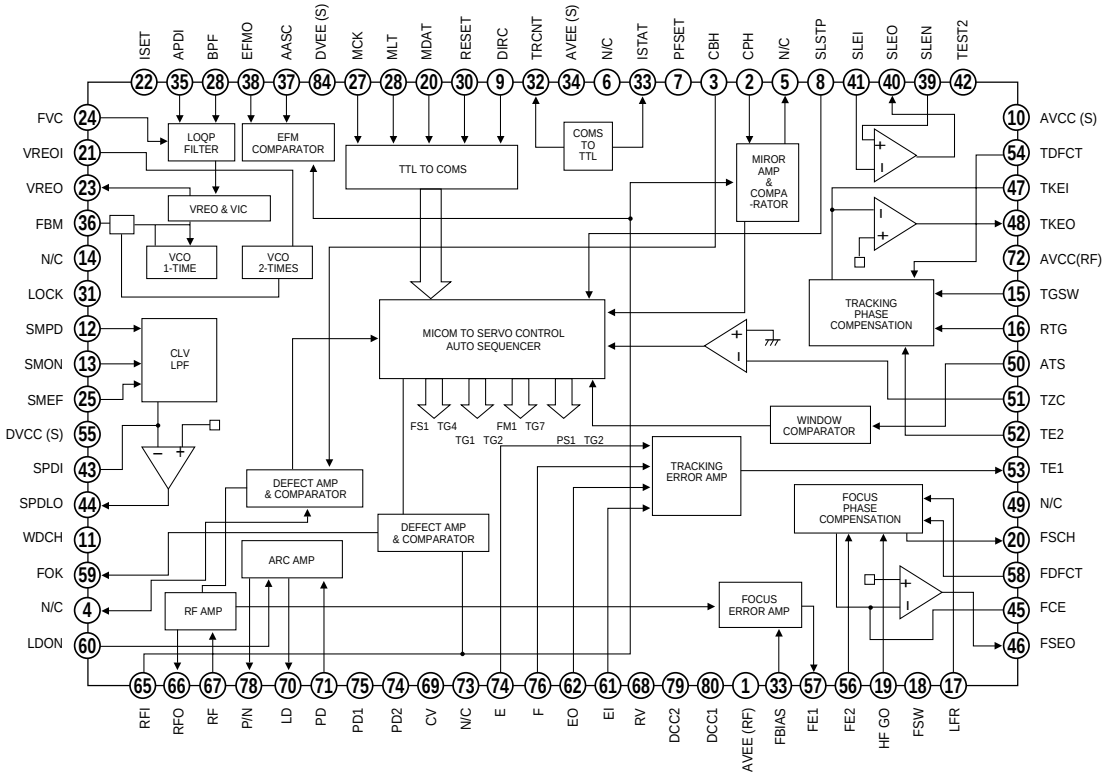

KA9270 : NIC9270



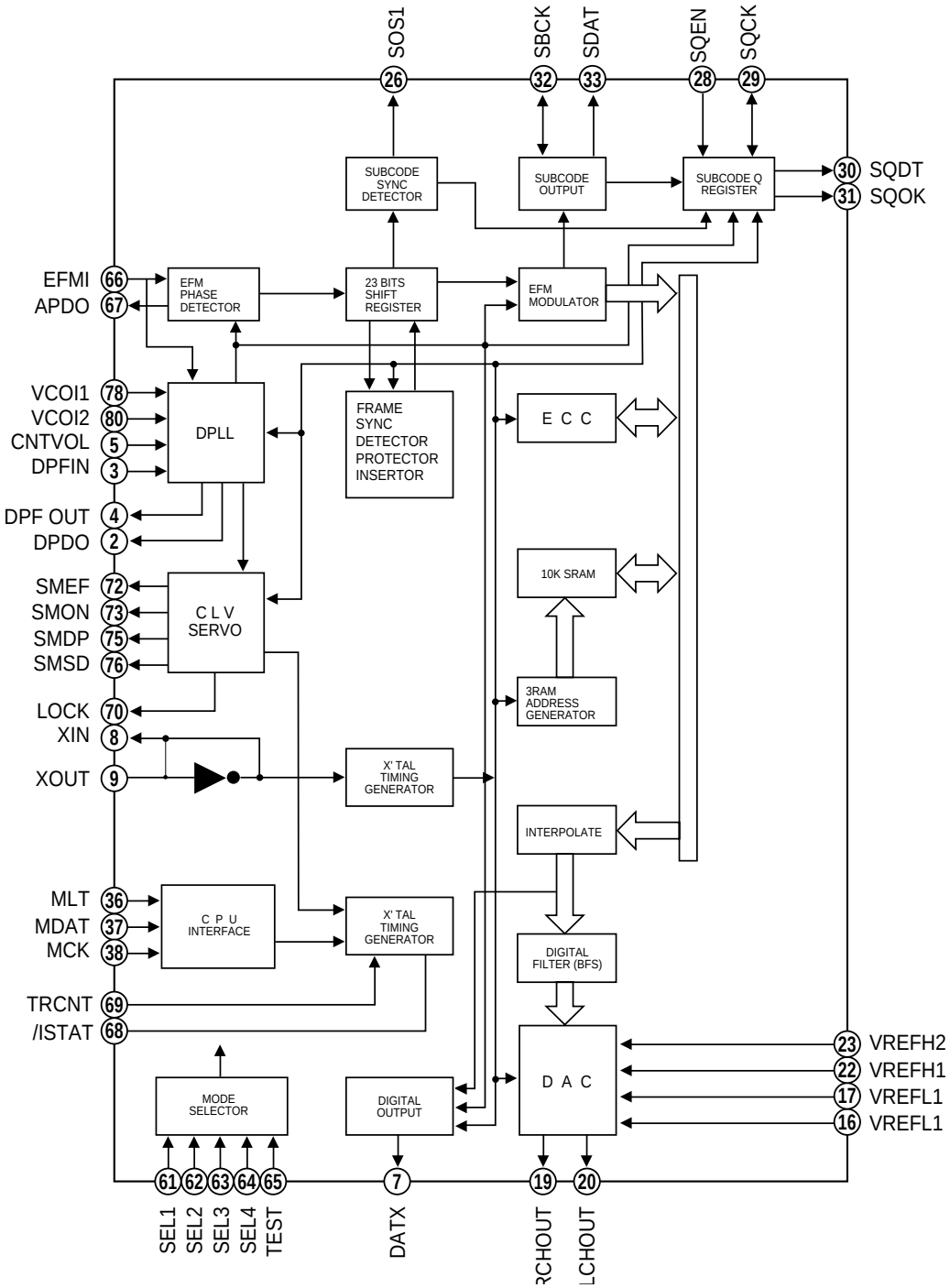

KA9258 : NIC9258



## KA9220(ASSP) : NIC9220



KS9282(DSP) : NIC9282



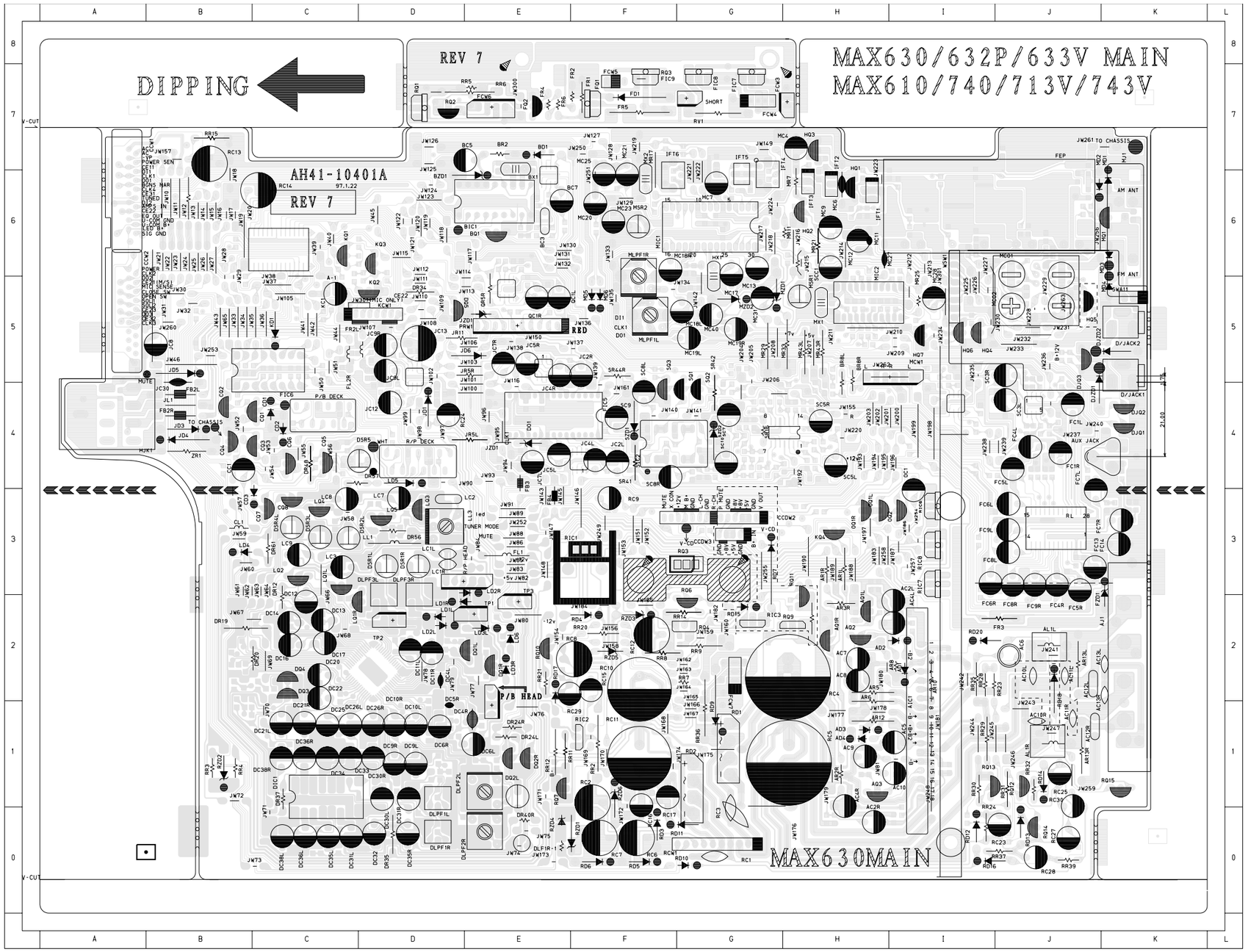
## 9-4 µ-COM : UIC1

| No. | Port | Name | I/O | Function |
|---|---|---|---|---|
| 1 | P5 2 | POWER | O | M65846(DSP+ECHO) LATCH |
| 2 | PWM1 | CE 22 | O | LC7536(VOLUME IC)CE |
| 3 | P2 0 | AMPSIN | I | AMPS SIGNAL IN |
| 4 | 1 | INPUT EXP.DI | I | MAIN AUDIO MUTE(TUNER) |
| 5 | 2 | POWER | O | TUNED |
| 6 | 3 | CLK4 | I | MSM6654(RELAX) CLOCK |
| 7 | 4 | DO 1 | O | LC72321,TDA7318,LC7236 |
| 8 | 5 | CLK 1 | | LC72321,TDA7318,LC7236 |
| 9 | 6 | DI 1 | | LC72321 DATA INPUT |
| 10 | 7 | CE 11 | | LC72321(PLL) CE |
| 11 | TEST | | | |
| 12 | RES | | | |
| 13 | XT 1 | | | |
| 14 | XT 2 | | | |
| 15 | VSS | | | |
| 16 | CF 1 | | | |
| 17 | CF 2 | | | |
| 18 | VDD | | | |
| 19 | P8 0 | KEY 1 | I | A/D KEY INPUT 1 |
| 20 | 1 | KEY 2 | I | A/D KEY INPUT 2 |
| 21 | 2 | KEY 3 | I | A/D KEY INPUT 3 |
| 22 | 3 | KEY 4 | I | A/D KEY INPUT4 |
| 23 | 4 | JOG 21 | I | MULTI JOG IN |
| 24 | 5 | JOG 22 | I | MULTI JOG IN |
| 25 | 6 | NAR | I | BGNS NAR |
| 26 | 7 | EQ IN | I | EQUALIZER INPUT |
| 27 | P7 0 | SCRO | I | SCOR INTERRUPT |
| 28 | 1 | T SENS | I | CD TRAY SENSE |
| 29 | 2 | SCOR | I | POWER SENSE |
| 30 | 3 | REMO | I | REMOCON INPUT |
| 31 | S 0 | | | |
| 32 | 1 | | | |
| 33 | 2 | | | |
| 34 | 3 | | | |
| 35 | 4 | | | |
| 36 | 5 | | | |
| 37 | 6 | | | |
| 38 | 7 | | | |
| 39 | 8 | | | |
| 40 | 9 | | | |
| 41 | 10 | | | |
| 42 | 11 | | | |
| 43 | 12 | | | |
| 44 | 13 | | | |
| 45 | 14 | | | |
| 46 | 15 | | | |
| 47 | VDVP | | | |
| 48 | V | | | |
| 49 | S 16 | | | |
| 50 | 17 | | | |

| No. | Port | Name | I/O | Function |
|---|---|---|---|---|
| 51 | S 18 | | | |
| 52 | 19 | | | |
| 53 | 20 | | | |
| 54 | 21 | | | |
| 55 | 22 | | | |
| 56 | 23 | | | |
| 57 | 24 | | | |
| 58 | 25 | | | |
| 59 | 26 | | | |
| 60 | 27 | | | |
| 61 | 28 | | | |
| 62 | 29 | | | |
| 63 | 30 | | | |
| 64 | 31 | | | |
| 65 | P0 0 | OPTION | I | TUNER,CD/VIDEO-CD |
| 66 | 1 | UD S/W | I | V10 UP UP/DOWN S/W |
| 67 | 2 | FOK | I | FOCUS OK |
| 68 | 3 | LKFS | I | GFS |
| 69 | 4 | MLT | O | DSP/SSP CONTROL LATCH |
| 70 | 5 | MDATA | O | DSP/SSP CONTROL DATA |
| 71 | 6 | MCK | O | DSP/SSP CONTROL CLOCK |
| 72 | 7 | V10M - | O | V10 DOWN MOTOR |
| 73 | P1 0 | V10M + | O | V10 UP MOTOR |
| 74 | 1 | SUBQ | I | SUB Q DATA INPUT |
| 75 | 2 | SQCK | O | SUB Q DATA INPUT CLOCK |
| 76 | 3 | DSP MT | O | DSP MUTE |
| 77 | 4 | OPEN M | O | CD OPEN MOTOR |
| 78 | 5 | CLOSE M | O | CD CLOSE MOTOR |
| 79 | 6 | ROUL - | O | ROULETTE MOTOR - |
| 80 | 7 | ROUL + | O | ROULETTE MOTOR + |
| 81 | P3 0 | ISTAT | O | SENSE |
| 82 | 1 | LD_XRS | O | LD ON + XRST |
| 83 | 2 | JOG 11 | I | JOG VOLUME1 |
| 84 | 3 | JOG 12 | I | JOG VOLUME 2 |
| 85 | 4 | SLATCH | O | LATCH(PRO LOGIC ◄— MAIN) |
| 86 | 5 | SDATA | O | DATA(PRO LOGIC ◄— MAIN) |
| 87 | 6 | VCLK | I | CLOCK(PRO LOGIC —► MAIN) |
| 88 | 7 | CE 32 | O | NJU3718(OUTPUT EXPAND) CE |
| 89 | VSS | | | |
| 90 | VDD | | | |
| 91 | P4 0 | DO 3 | O | NJU3718 DATA OUTPUT |
| 92 | 1 | CLK 3 | O | NJU3718 CLOCK |
| 93 | 2 | CE 31 | O | NJU3718(OUTPUT) CE |
| 94 | 3 | CE 23 | O | TC9173(INPUT EXPAND)CE |
| 95 | 4 | SOL 1 | O | 1 DECK SOLENOID |
| 96 | 5 | SOL 2 | I | 2 DECK SOLENOID |
| 97 | 6 | MICSNS | I | MIC INPUT SENSE |
| 98 | 7 | CE 21 | O | M65840(KEY CON) LATCH / ST |
| 99 | P5 0 | DO 2 | O | M65840,65846,MSM6654,TC9173 |
| 100 | 1 | CLK 2 | O | M65840,M65846,TC9173 |

# 10 PCB Diagrams

## 10-1 Main



## PCB Diagrams

### *** RESISTOR ***

X (H2)
AR10 (I1)
AR12 (H1)
AR13L (J2)
AR13R (J1)
AR1L (H3)
AR1R (H3)
AR2R (H1)
AR3R (H2)
AR5 (H2)
AR6 (H1)
AR8 (I2)
BR2 (E7)
BR8L (H4)
BR8R (H4)
DC4R (E1)
DR12 (C2)
DR19 (B2)
DR20 (C2)
DR24L (E1)
DR24R (E1)
DR34 (D5)
DR35 (D0)
DR37 (C0)
DR40R (E0)
DR48 (C4)
DR56 (D3)
DR57 (C4)
DR61 (C3)
FR1 (F7)
FR2 (F7)
FR3 (I2)
FR4 (E7)
FR5 (F7)
FR6 (E7)
JR11 (D5)
JR5L (D4)
JR5R (D5)
JW13 (B6)
KD3 (D6)
MR11 (H6)
MR21 (H6)
MR25 (I5)
MR29 (G5)
MR33 (H5)
MR43L (H5)
MR43R (H5)
MR7 (H6)
QR5R (E5)
RR11 (E1)
RR12 (E1)
RR14 (F2)
RR15 (B7)
RR2 (F1)
RR20 (F2)
RR21 (E2)
RR23 (I1)
RR24 (I0)
RR28 (I1)
RR29 (I1)
RR3 (B1)
RR30 (I1)
RR31 (J1)
RR32 (J1)
RR35 (I1)
RR36 (G1)
RR37 (I0)
RR39 (J0)
RR4 (B1)
RR5 (E7)
RR6 (E7)
RR7 (F2)
RR8 (F2)
RR9 (F2)
RV1 (G7)
SR16 (G4)
SR41 (F4)
SR42 (G4)
SR44R (F5)
ZR1 (B4)

### *** CONDENSER ***

AC10 (H1)
AC10L (J2)
AC10R (J1)
AC11L (J2)
AC11R (J1)
AC12L (J2)
AC12R (J1)
AC13L (K2)
AC13R (K1)
AC2L (H2)
AC2R (H0)
AC4L (H2)
AC4R (H1)
AC5 (I1)
AC6 (J2)
AC7 (H2)
AC8 (H2)
AC9 (H1)
BC3 (E6)
BC5 (E7)
BC7 (E6)
CC1 (B4)
DC10L (D1)
DC10R (D1)
DC11L (D2)
DC11R (D2)
DC12 (C3)
DC13 (C2)
DC14 (C2)
DC16 (C2)
DC17 (C2)
DC20 (C2)
DC21L (C1)
DC21R (C1)
DC22 (C2)
DC25 (C1)
DC26L (C1)
DC26R (D1)
DC30L (D0)
DC30R (D1)
DC31L (C0)
DC31R (D0)
DC32 (D0)
DC33 (C1)
DC34 (C1)
DC35L (C0)
DC35R (D0)
DC36L (C0)
DC36R (C1)
DC38L (C0)
DC38R (C1)
DC4L (D2)
DC5R (D1)
DC6L (E1)
DC6R (D1)
DC9L (D1)
DC9R (D1)
FC13 (J3)
FC14 (K3)
FC1L (J4)
FC1R (J4)
FC4L (J4)
FC4R (J3)
FC5L (J4)
FC5R (J3)
FC6L (J3)
FC6R (I3)
FC7L (J3)
FC7R (K3)
FC8L (J3)
FC8R (J3)
FC9L (J3)
FC9R (J3)
JC12 (D4)
JC13 (D5)
JC2L (F4)
JC2R (F5)
JC30 (B5)
JC4L (F4)
JC4R (E5)
JC5L (E4)
JC5R (E5)
JC7L (E4)
JC7R (E5)
JC8 (B5)
JC9L (D5)
JC9R (D5)
KC1 (C5)
LC1L (D3)
LC1R (D3)
LC2 (D3)
LC3 (C3)
LC7 (D3)
LC8 (C3)
LC9 (C3)
LL1 (D3)
MC11 (H6)
MC12 (H6)
MC13 (G6)
MC17 (G6)
MC18L (G5)
MC18R (F6)
MC19L (G5)
MC19R (G5)
MC20 (F6)
MC21 (F7)
MC23 (F6)
MC25 (F7)
MC27 (H6)
MC28 (I5)
MC31 (G5)
MC4 (H7)
MC40 (G5)
MC6 (H6)
MC7 (G6)
MC9 (H6)
OC1 (I3)
QC1L (E5)
QC1R (E5)
RC1 (G0)
RC10 (F2)
RC11 (F1)
RC12 (F2)
RC13 (B7)
RC14 (B6)
RC15 (F2)
RC16 (F1)
RC17 (F1)
RC2 (F1)
RC23 (J0)
RC24 (D4)
RC25 (J1)
RC27 (J0)
RC28 (J0)
RC29 (E2)
RC3 (G0)
RC30 (J1)
RC4 (H2)
RC5 (H1)
RC6 (F0)
RC7 (F0)
RC8 (E2)
RC9 (F3)
SC10 (G4)
SC3L (J4)
SC3R (J5)
SC5L (H4)
SC5R (H4)
SC7 (G4)
SC8L (F4)
SC8R (G4)
SC9 (F4)
SCC1 (H6)

### *** DIODE ***

AD1 (I2)
AD2 (I2)
AD3 (H1)
AD4 (H1)
BD1 (E7)
BZD1 (E6)
CD1 (C4)
CD2 (C4)
CD3 (C3)
DJZD1 (J5)
DJZD2 (J5)
FD1 (F7)
FZD1 (K3)
JD1 (D4)
JD3 (B4)
JD4 (B4)
JD5 (B5)
JD6 (E5)
JZD1 (E4)
JZD1 (E5)
KD1 (C5)
LD1L (D2)
LD1R (D2)
LD2L (D2)
LD2R (E3)
LD3L (E2)
LD3R (E2)
LD4 (B3)
LD5 (D4)
LD6 (E2)
MD1 (K7)
MD2 (J6)
MD3 (K6)
MD4 (K6)
MD5 (F5)
MD6 (F5)
MZD1 (G5)
MZD2 (G5)
RD10 (G0)
RD11 (F0)
RD12 (I0)
RD13 (J0)
RD14 (J1)
RD15 (G2)
RD16 (I0)
RD17 (E2)
RD18 (J2)
RD20 (I2)
RD3 (F0)
RD4 (F2)
RD5 (F0)
RD6 (F0)
RD7 (G3)
RZD1 (F0)
RZD2 (B1)
RZD3 (F2)
RZD5 (F2)
RZD6 (F1)
SZD1 (F4)
SZD2 (G4)

### *** TR ***

AQ1L (H2)
AQ1R (H2)
AQ2 (H2)
AQ3 (H1)
BQ1 (E6)
CQ1 (C4)
CQ2 (B4)
CQ3 (C4)
CQ4 (B4)
CQ5 (C4)
CQ6 (C4)
CQ7 (C3)
CQ8 (C3)
DJQ1 (K4)
DJQ2 (K4)
DJQ3 (J5)
DQ1L (E2)
DQ1R (E2)
DQ2L (E1)
DQ2R (E1)
DQ3 (C2)
DQ4 (C2)
DQ5 (D5)
FQ2 (E7)
HQ1 (H6)
HQ2 (H6)
HQ3 (H7)
HQ4 (I5)
HQ5 (J5)
HQ6 (I5)
HQ7 (I5)
KQ1 (C6)
KQ2 (D5)
KQ3 (D6)
KQ4 (H3)
LQ1L (C3)
LQ1R (D2)
LQ2 (C3)
LQ3 (D3)
LQ4 (C3)
LQ5 (D3)
MQ1 (K6)
OQ1L (H3)
OQ1R (H3)
OQ2 (I3)
RIC2 (F1)
RIC3 (G2)
RQ10 (E2)
RQ11 (H3)
RQ12 (J1)
RQ13 (I1)
RQ14 (J0)
RQ15 (K1)
RQ2 (D7)
RQ6 (G2)
RQ7 (E1)
RQ9 (H2)
SQ1 (G4)
SQ2 (G4)
SQ3 (F4)

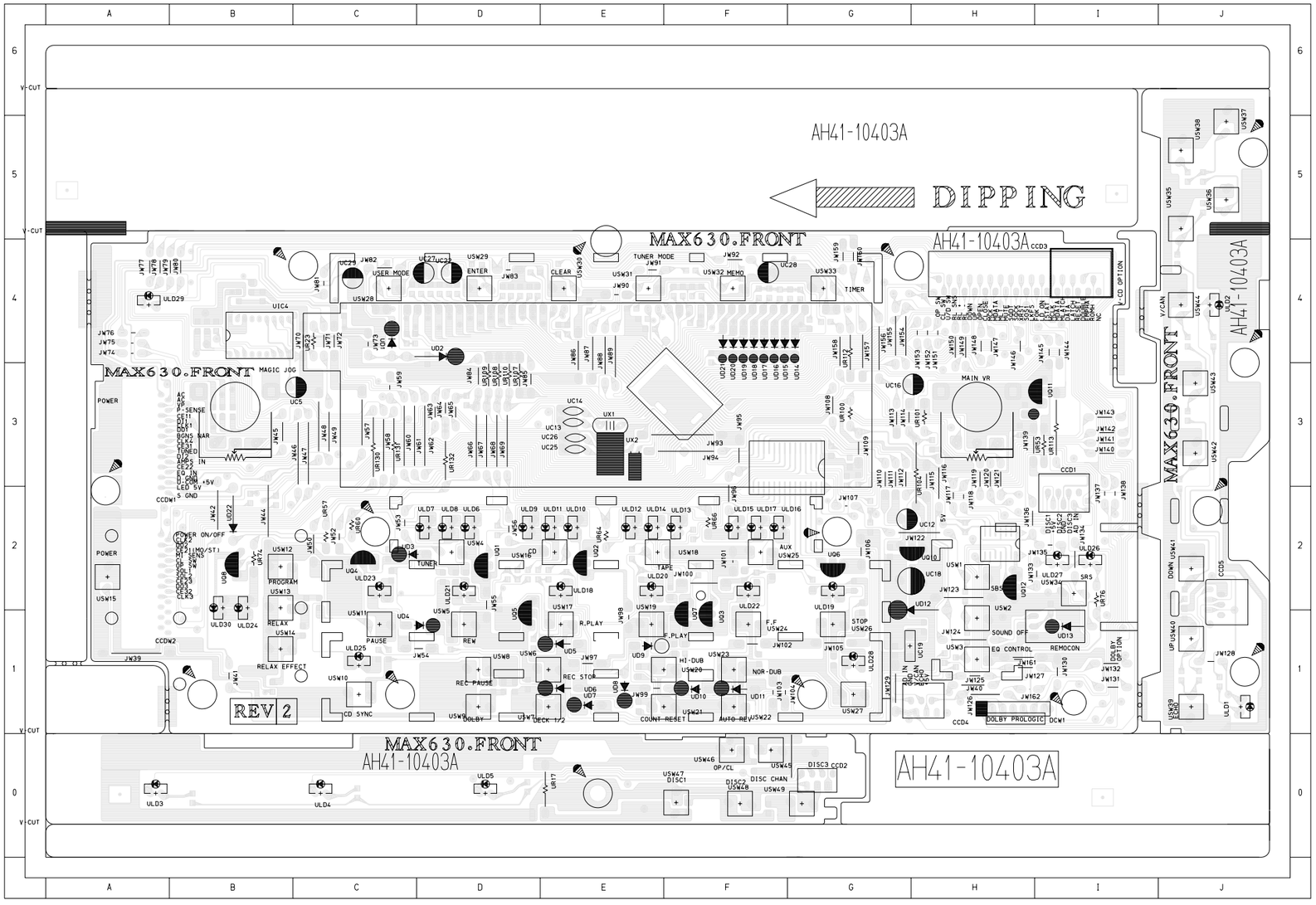
### *** IC&WAFER ***

X (E1)
CCDW2 (G3)
CCDW3 (G3)
DIC1 (C0)
DLPF1L (D1)
DLPF1R (D0)
DLPF3L (D3)
DLPF3R (D3)
FCW3 (H7)
FCW4 (G7)
FCW5 (F7)
FCW6 (E7)
FCW7 (G2)
IFT4 (G7)
IFT5 (G6)
IFT6 (F7)
KCW1 (D5)
MCW1 (I5)
PRW1 (E5)
R/P HEAD (D3)
RCW1 (G0)
SHORT (G7)
SWA11 (K5)
TP1 (E2)
TP2 (D2)
TP3 (E2)

### *** CHIP ***

AC14L (I2)
AC14R (I1)
AC3L (H3)
AC3R (H0)
AR11L (I2)
AR11R (I0)
AR14 (I1)
AR15 (H1)
AR2L (H2)
AR30 (H1)
AR31 (H2)
AR3L (H2)
AR4L (I2)
AR4R (I0)
AR5L (H3)
AR5R (H0)
AR7 (I2)
AR9L (I2)
AR9R (I1)
BC1 (E7)
BC2 (E7)
BC4 (E6)
BC6 (E6)
B1C2 (E6)
B1C3 (I4)
BR1 (E6)
BR10L (I4)
BR10R (I5)
BR11 (H4)
BR3 (E6)
BR4 (E6)
BR5 (E6)
BR6 (E6)
BR7L (H5)
BR7R (H4)
BR9L (I4)
BR9R (I5)
CC4 (C4)
CR1L (H3)
CR1R (H3)
CR2L (J3)
CR2R (I3)
CR3L (J3)
CR3R (J3)
DC15 (C2)
DC18 (B2)
DC19 (B2)
DC1L (D2)
DC1R (E2)
DC23 (C2)
DC24 (C2)
DC2L (D2)
DC2R (E2)
DC39L (B2)
DC39R (B1)
DC40L (C0)
DC40R (D0)
DC41 (D4)
DC43 (C4)
DC44 (C4)
DC45L (D2)
DC45R (E1)
DC46L (E1)
DC46R (D0)
DC47L (D1)
DC47R (D0)
DC5L (E1)
DC7L (D1)
DC7R (D1)
DJR1 (J5)
DJR2 (J5)
DR10L (B2)
DR10R (B1)
DR11L (D2)
DR11R (D2)
DR13 (E2)
DR14 (C2)
DR15 (E2)
DR16 (B5)
DR17 (C2)
DR18 (C2)
DR1L (D2)
DR1R (E2)
DR21 (B2)
DR22 (B2)
DR23 (B2)
DR25 (C0)
DR26 (C0)
DR27 (C0)
DR28 (C0)
DR29 (C1)
DR2L (D1)
DR2R (D1)
DR30L (C0)
DR30R (D0)
DR31L (C0)
DR31R (C1)
DR32L (C0)
DR32R (D0)
DR33L (D1)
DR33R (D1)
DR36 (C1)
DR38 (D1)
DR39 (D5)
DR3L (D1)
DR3R (D1)
DR40L (E1)
DR41L (E1)
DR41R (E0)
DR42 (C5)
DR43 (C5)
DR44 (C5)
DR45 (C4)
DR46 (C4)
DR47 (D4)
DR49 (B4)
DR4L (D1)
DR4R (D1)
DR50 (C5)
DR51 (C5)
DR52 (C5)
DR53 (B4)
DR54 (B4)
DR55 (D4)
DR58 (D3)
DR59 (B4)
DR5L (D1)
DR5R (D0)
DR60 (C2)
DR62 (D3)
DR63 (C5)
DR64 (B5)
DR65 (B5)
DR66 (C5)
DR67 (C5)
DR68 (C5)
DR6L (E1)
DR6R (D1)
DR7 (C1)
DR70 (C5)
DR71L (C1)
DR71R (D1)
DR7L (D2)
DR7R (D2)
DR8 (D0)
DR9L (C2)
DR9R (B1)
DSR6 (C4)
FC11 (J3)
FC12 (J3)
FC2L (J4)
FC2R (J4)
FC3L (J4)
FC3R (J4)
FDC1 (C1)
FDC2 (C2)
FDC3 (E1)
FFC1 (J3)
FIC1 (J3)
FIC2 (F4)
FIC3 (C6)
FIC4 (E5)
FJ1 (E2)
FJ2 (E1)
FJC1 (E4)
FJC2 (E4)
FJC3 (D4)
FJC4L (B5)
FR1L (J4)
FR1R (J4)
FR2L (J4)
FR2R (J4)
FR4L (I4)
FR4R (I3)
FR4R (B4)
FSC1 (H4)
FSC2 (G5)
GR1 (C5)
HIC1 (D5)
J10 (B6)
J11 (C3)
J12 (C2)
J13 (G4)
J14 (D1)
J16 (D6)
J17 (F4)
J18 (F5)
J19 (G6)
J20 (G6)
J21 (G6)
J22 (H6)
J23 (G5)
J24 (G4)
J25 (H4)
J26 (G3)
J27 (I4)
J28 (I5)
J29 (H5)
J30 (I5)
J301 (J7)
J31 (H6)
J32 (I4)
J33 (I6)
J34 (I6)
J36 (I6)
J37 (J6)
J38 (J5)
J39 (J5)
J40 (B1)
J41 (J3)
J42 (J4)
J43 (C2)
J44 (J6)
J45 (D5)
J46 (J5)
J47 (J6)
JC10L (D5)
JC10R (C5)
JC11 (A4)
JF1 (J6)
JF2 (J7)
J1C1 (D2)
JR11L (E4)
JR11R (E4)
JR1L (F4)
JR1R (E5)
JR2L (E4)
JR2R (E5)
JR6L (D4)
JR6R (D5)
JR7L (D4)
JR7R (D5)
JR8L (D4)
JR8R (D5)
JR9 (A5)
KR1 (B5)
KR2 (D6)
KR3 (C6)
KR4 (C5)
KR5 (D5)
KR6 (C5)
LC10L (D2)
LC10R (D2)
LC4 (D3)
LC5 (D3)
LC6 (D3)
MC1 (I6)
MC10 (H6)
MC14 (G6)
MC15 (G6)
MC16L (G6)
MC16R (G5)
MC2 (J6)
MC22 (F6)
MC24 (I6)
MC26 (G6)
MC29 (H5)
MC3 (J5)
MC30 (H5)
MC32 (I6)
MC33 (H5)
MC34 (H5)
MC35 (H5)
MC36 (I6)
MC42 (K5)
MC43 (G6)
MC44 (I6)
MC45 (J6)
MC47L (I4)
MC47R (J3)
MC48 (H6)
MC5 (H6)
MC8 (G7)
MFC1 (I6)
MR1 (I6)
MR10 (H6)
MR12 (J5)
MR13 (I5)
MR14 (I5)
MR15 (I5)
MR16 (I5)
MR18 (J6)
MR19 (I5)
MR2 (J6)
MR20 (H6)
MR23 (F7)
MR24 (G7)
MR26 (F6)
MR26L (F5)
MR26R (F6)
MR27 (F6)
MR28 (F6)
MR3 (J6)
MR30 (H5)
MR31 (I5)
MR32 (F6)
MR35 (H5)
MR36 (H5)
MR37 (H5)
MR39 (H5)
MR4 (I6)
MR40 (H5)
MR41 (H5)
MR42L (G6)
MR42R (G5)
MR44L (H4)
MR44R (H4)
MR45 (H7)
MR46 (H7)
MR47 (J6)
MR48 (J6)
MR49 (I6)
MR5 (H6)
MR50 (I5)
MR6 (H7)
MR8 (H6)
MR9 (H6)
MR91 (G6)
OPT1L (D1)
OPT1R (D0)
OPT2L (F4)
OPT2R (F4)
QIC1 (E5)
QR1L (E5)
QR1R (E5)
QR2L (E6)
QR2R (E5)
QR3L (E6)
QR3R (E5)
QR4L (E6)
QR4R (E5)
QR5L (E6)
RR10 (E1)
RR13 (G2)
RR15 (B7)
RR16 (F1)
RR17 (F1)
RR18 (G2)
RR22 (H2)
RR25 (J0)
RR26 (F1)
RR27 (J0)
RR33 (J1)
RR34 (J0)
RR38 (I0)
RR41 (E2)
RR42 (E2)
RR43 (F3)
SC2L (J4)
SC2R (J4)
SC6 (G4)
S1C1 (H4)
S1C3 (J4)
SJW1 (J5)
SJW2 (J6)
SJW3 (K6)
SR10 (H4)
SR11 (H4)
SR12 (H4)
SR13L (H4)
SR13R (H4)
SR14 (G4)
SR15 (G4)
SR17 (G4)
SR18 (G4)
SR19 (G4)
SR1L (J4)
SR1R (J4)
SR20 (G4)
SR21 (G4)
SR22 (G4)
SR23 (G4)
SR24 (G4)
SR25 (G4)
SR26 (G4)
SR27 (H4)
SR28 (G4)
SR29 (G4)
SR2L (J4)
SR2R (J4)
SR30L (G4)
SR30R (G4)
SR31L (H4)
SR31R (H4)
SR32 (G4)
SR33 (G4)
SR34 (G4)
SR35 (G4)
SR36 (G4)
SR39L (F4)
SR39R (F4)
SR3L (J4)
SR3R (J4)
SR40L (G4)
SR40R (F4)
SR43 (F4)
SR44L (F4)
SR4L (J4)
SR4R (J4)
SR5L (G4)
SR5R (G4)
SR6L (H4)
SR6R (H4)
SR7L (H4)
SR7R (H4)
SR8 (H4)
SR9 (G4)
XC1L (K3)
XC1R (K3)
XR1L (J4)
XR1R (K4)
XR2L (K3)
XR2R (K3)
ZC1 (B4)
ZC10 (I1)
ZC2 (C5)
ZC3 (D5)
ZC6 (E2)
ZC7 (E2)
ZC8 (H1)
ZC9 (H1)
ZR2 (C5)
ZR3 (D5)

# 10-2 Front




### *** RESISTOR ***

UR100 (G3)
UR101 (H3)
UR104 (H2)
UR107 (D3)
UR108 (D3)
UR109 (D3)
UR110 (D3)
UR112 (G3)
UR113 (I3)
UR130 (C3)
UR131 (C3)
UR132 (D2)
UR17 (E0)
UR23 (C4)
UR53 (I3)
UR57 (C2)
UR60 (C2)
UR64 (E2)
UR66 (F2)
UR74 (B2)
UR76 (I1)

### *** CONDENSER ***

UC12 (G2)
UC13 (E3)
UC14 (E3)
UC16 (G3)
UC18 (G2)
UC22 (D4)
UC25 (E3)
UC26 (E3)
UC27 (D4)
UC28 (F4)
UC29 (C4)
UC5 (B3)

### *** DIODE ***

UD1 (C4)
UD10 (F1)
UD11 (F1)
UD12 (G2)
UD13 (I1)
UD14 (G4)
UD15 (F4)
UD16 (F4)
UD17 (F4)
UD18 (F4)
UD19 (F4)
UD2 (D4)
UD20 (F4)
UD21 (F4)
UD22 (B2)
UD3 (C2)
UD4 (D1)
UD5 (E1)
UD6 (E1)
UD7 (E1)
UD8 (E1)
UD9 (E1)

### *** TR ***

UQ1 (D2)
UQ10 (H2)
UQ11 (I3)
UQ12 (H2)
UQ2 (E2)
UQ3 (F1)
UQ4 (C2)
UQ5 (D1)
UQ6 (G2)
UQ7 (F1)
UQ8 (B2)

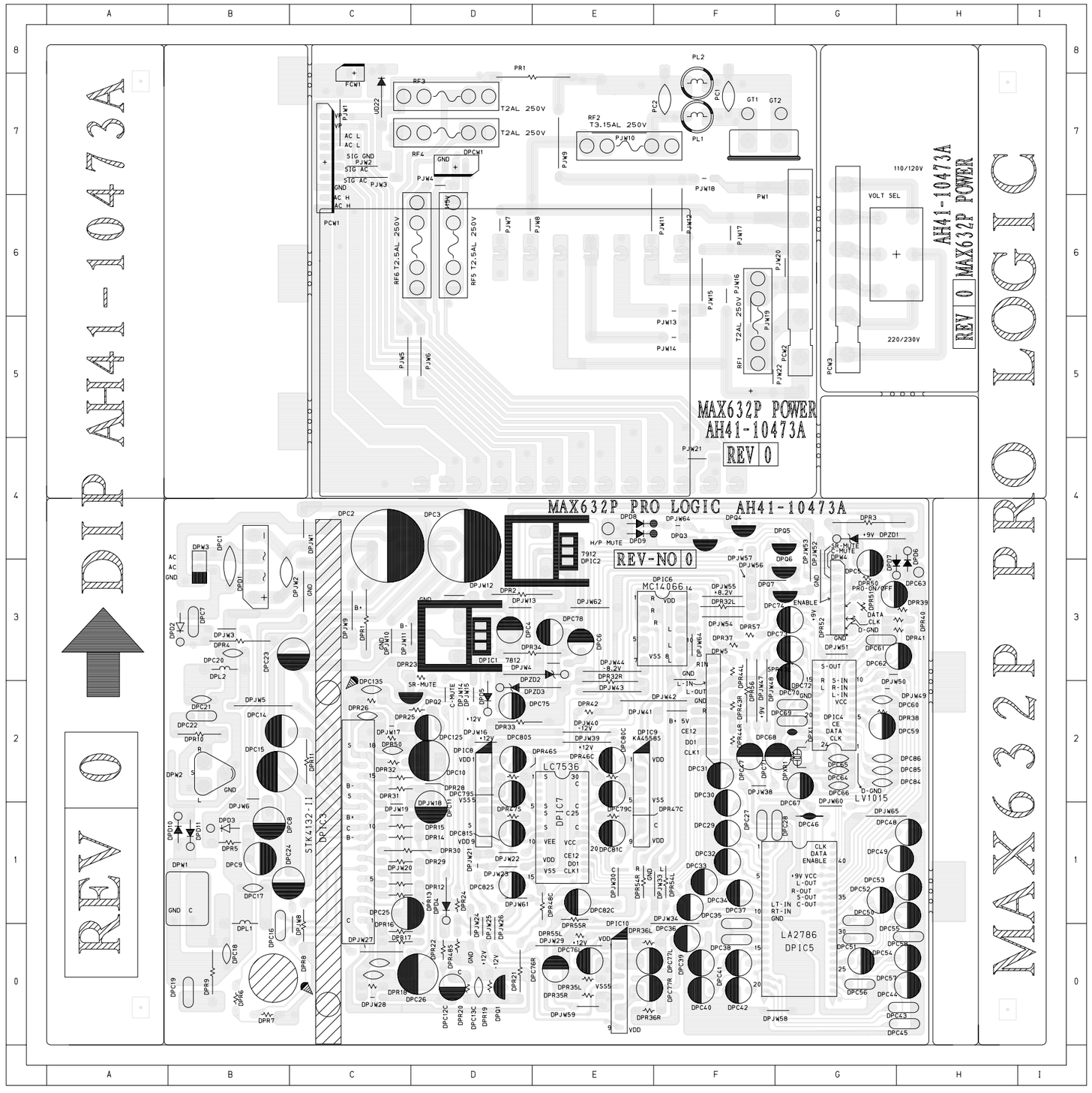
### *** IC&WAFER ***

DCW1 (H1)
UC19 (G1)
UIC1 (F3)
USW1 (H2)
USW10 (C1)
USW11 (C1)
USW12 (B2)
USW13 (B2)
USW14 (B1)
USW15 (A2)
USW16 (E2)
USW17 (E1)
USW18 (E2)
USW19 (E1)
USW2 (H1)
USW20 (F1)
USW21 (F1)
USW22 (F1)
USW23 (F1)
USW24 (F1)
USW25 (F2)
USW26 (G1)
USW27 (G1)
USW28 (C4)
USW29 (D4)
USW3 (H1)
USW30 (E4)
USW31 (E4)
USW32 (F4)
USW33 (G4)
USW34 (I2)
USW35 (J5)
USW36 (J5)
USW37 (J5)
USW38 (J5)
USW39 (J1)
USW4 (D2)
USW40 (J1)
USW41 (J2)
USW42 (J3)
USW43 (J3)
USW44 (J4)
USW45 (F0)
USW46 (F0)
USW47 (F0)
USW48 (F0)
USW49 (G0)
USW5 (D1)
USW6 (E1)
USW7 (E1)
USW8 (D1)
USW9 (D1)

### *** CHIP ***

JW1 (C2)
JW10 (I4)
JW15 (D2)
JW16 (F1)
JW17 (H1)
JW18 (J1)
JW2 (D2)
JW3 (D2)
JW4 (F1)
JW5 (D4)
JW6 (F2)
JW7 (H1)
JW8 (G2)
JW9 (H4)
UC1 (B4)
UC10 (G3)
UC17 (G1)
UC2 (B4)
UC21 (I2)
UC23 (E4)
UC3 (B4)
UC4 (B4)
UC6 (G2)
UC7 (H3)
UC8 (H3)
UC9 (G3)
UIC1 (F3)
UR1 (J4)
UR10 (J4)
UR103 (H2)
UR105 (G2)
UR106 (H1)
UR11 (J1)
UR111 (G4)
UR114 (F4)
UR115 (F4)
UR12 (J4)
UR121 (H3)
UR124 (B3)
UR125 (B3)
UR126 (B3)
UR127 (B2)
UR128 (B2)
UR129 (D3)
UR13 (B0)
UR134 (D4)
UR135 (E4)
UR136 (E4)
UR137 (F4)
UR138 (F4)
UR139 (F4)
UR14 (C0)
UR140 (F4)
UR141 (F4)
UR142 (F4)
UR143 (E4)
UR15 (D0)
UR16 (F0)
UR18 (F0)
UR19 (F0)
UR2 (J5)
UR20 (I2)
UR21 (B4)
UR22 (B4)
UR24 (H2)
UR25 (H1)
UR26 (D2)
UR27 (D1)
UR28 (D1)
UR29 (D1)
UR3 (J5)
UR30 (D1)
UR31 (D1)
UR32 (C1)
UR33 (C2)
UR34 (C2)
UR35 (C1)
UR36 (B1)
UR37 (D2)
UR38 (E2)
UR39 (F2)
UR4 (J5)
UR40 (F1)
UR41 (E1)
UR42 (E1)
UR43 (F1)
UR44 (F1)
UR45 (F2)
UR46 (G2)
UR47 (G1)
UR48 (C4)
UR49 (D4)
UR5 (J1)
UR50 (E4)
UR51 (F4)
UR52 (F4)
UR54 (H2)
UR55 (G3)
UR56 (G3)
UR58 (F2)
UR6 (J1)
UR61 (D2)
UR62 (D2)
UR63 (D2)
UR65 (E2)
UR67 (F2)
UR68 (E2)
UR69 (G2)
UR7 (J2)
UR70 (E2)
UR71 (D2)
UR72 (F2)
UR73 (C2)
UR75 (C1)
UR77 (G2)
UR78 (C4)
UR79 (C4)
UR8 (J3)
UR80 (C4)
UR81 (C4)
UR82 (D4)
UR83 (D4)
UR84 (D4)
UR85 (D4)
UR86 (D4)
UR87 (D4)
UR88 (D4)
UR89 (D4)
UR9 (J3)
UR90 (D4)
UR91 (D4)
UR92 (D4)
UR93 (E4)
UR94 (E4)
UR95 (F4)
UR96 (G4)
UR97 (G4)
UR98 (G4)
UR99 (D1)

# 10-3 Pro Logic & Power




*** RESISTOR ***

X (C0)
DPR1 (C3)
DPR10 (B2)
DPR11 (C2)
DPR12 (C1)
DPR13 (C1)
DPR14 (C1)
DPR15 (C1)
DPR16 (C0)
DPR18 (C0)
DPR19 (D0)
DPR2 (D3)
DPR20 (D0)
DPR21 (D0)
DPR22 (D0)
DPR23 (D3)
DPR24 (D1)
DPR25 (C2)
DPR26 (C2)
DPR28 (C2)
DPR29 (C1)
DPR3 (G4)
DPR30 (C1)
DPR31 (C2)
DPR32 (C2)
DPR32L (F3)
DPR32R (E2)
DPR33 (D2)
DPR34 (D3)
DPR35L (E0)
DPR35R (E0)
DPR36L (E0)
DPR36R (E0)
DPR37 (F3)
DPR38 (G2)
DPR39 (G3)
DPR4 (B3)
DPR40 (G3)
DPR41 (G3)
DPR42 (E2)
DPR43R (F2)
DPR44L (F2)
DPR44R (F2)
DPR46C (E2)
DPR46S (D2)
DPR47C (E1)
DPR47S (D1)
DPR48C (E1)
DPR48S (D0)
DPR5 (B1)
DPR50 (G3)
DPR50 (C2)
DPR51 (G3)
DPR52 (G3)
DPR54L (F1)
DPR54R (E1)
DPR55L (E0)
DPR55R (E1)
DPR56 (F2)
DPR57 (F3)
DPR6 (B0)
DPR7 (B0)
DPR8 (C0)
DPR9 (B0)
DPXR1 (G2)
PR1 (D7)
SPR43L (G3)

*** CONDENSER ***

DPC10 (D2)
DPC11 (D2)
DPC12C (D0)
DPC12S (D2)
DPC13C (D0)
DPC13S (C2)
DPC14 (C2)
DPC15 (B2)
DPC17 (B1)
DPC18 (B0)
DPC2 (C4)
DPC20 (B3)
DPC21 (B2)
DPC23 (C3)
DPC24 (B1)
DPC25 (C1)
DPC26 (D0)
DPC29 (F1)
DPC3 (D4)
DPC30 (F1)
DPC31 (F2)
DPC32 (F1)
DPC33 (F1)
DPC34 (F1)
DPC35 (F1)
DPC36 (F0)
DPC39 (F0)
DPC4 (D3)
DPC40 (F0)
DPC41 (F0)
DPC42 (F0)
DPC44 (H0)
DPC46 (G1)
DPC47 (F2)
DPC48 (H1)
DPC49 (G1)
DPC5 (G3)
DPC52 (G1)
DPC53 (H1)
DPC54 (G0)
DPC55 (H1)
DPC57 (H0)
DPC59 (G2)
DPC6 (E3)
DPC60 (G2)
DPC62 (G3)
DPC63 (G3)
DPC64 (G2)
DPC65 (G2)
DPC66 (G2)
DPC67 (G2)
DPC68 (G2)
DPC71 (G2)
DPC72 (G3)
DPC73 (G3)
DPC74 (G3)
DPC75 (D2)
DPC76L (E0)
DPC76R (E0)
DPC77L (E0)
DPC77R (E0)
DPC78 (E3)
DPC79C (E2)
DPC79S (D2)
DPC8 (B1)
DPC80C (E2)
DPC80S (D2)
DPC81C (E1)
DPC81S (D1)
DPC82C (E1)
DPC82S (D1)
DPC84 (G2)
DPC85 (G2)
DPC86 (G2)
DPC9 (B1)
PC1 (F7)
PC2 (F7)

*** DIODE ***

DPD10 (B1)
DPD11 (B1)
DPD2 (B3)
DPD3 (B1)
DPD4 (D1)
DPD5 (D2)
DPD6 (H4)
DPD7 (H3)
DPD8 (F4)
DPD9 (F4)
DPZD1 (G4)
DPZD2 (E3)
DPZD3 (D2)
UD22 (C8)

*** TR ***

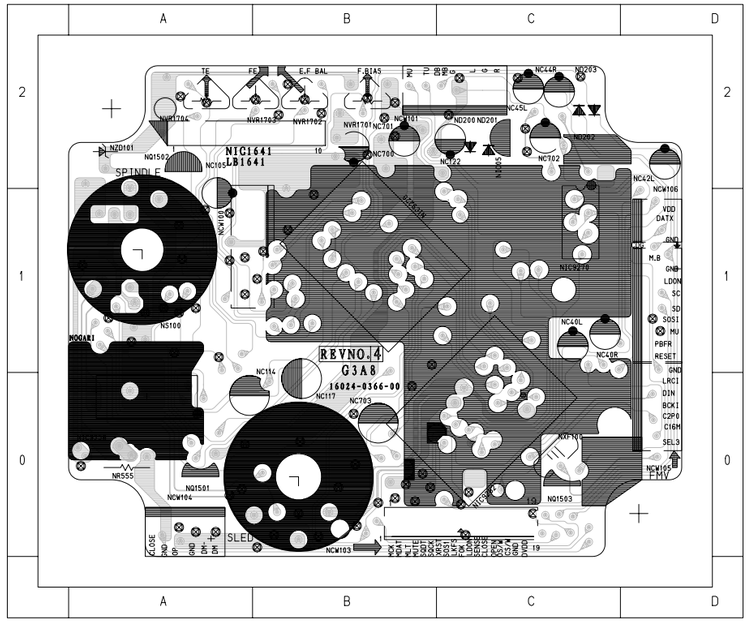
DPQ1 (D0)
DPQ2 (D2)
DPQ3 (F4)
DPQ4 (F4)
DPQ5 (G4)
DPQ6 (G3)
DPQ7 (G3)

*** IC&WAFER ***

DPCW1 (D7)
DPIC10 (E0)
DPIC4 (G2)
DPIC5 (F1)
DPIC6 (E3)
DPIC8 (D2)
DPIC9 (E2)
DPW3 (B3)
FCW1 (C8)
PCW1 (C7)
VOLT SEL (H6)

# 10-4 CD

## 10-4-1 Top View




*** RESISTOR ***

NR555 (A0)

*** CONDENSER ***

NC105 (A1)
NC114 (A0)
NC117 (B0)
NC122 (C2)
NC40L (C1)
NC40R (C1)
NC42L (D2)
NC44R (C2)
NC45L (C2)
NC700 (B2)
NC701 (B2)
NC702 (C2)
NC703 (B0)

*** DIODE ***

ND200 (C2)
ND201 (C2)
ND202 (C2)
ND203 (C2)
NZD101 (A2)

*** TR ***

NIC05 (C2)
NQ1501 (A0)
NQ1502 (A2)
NQ1503 (C0)

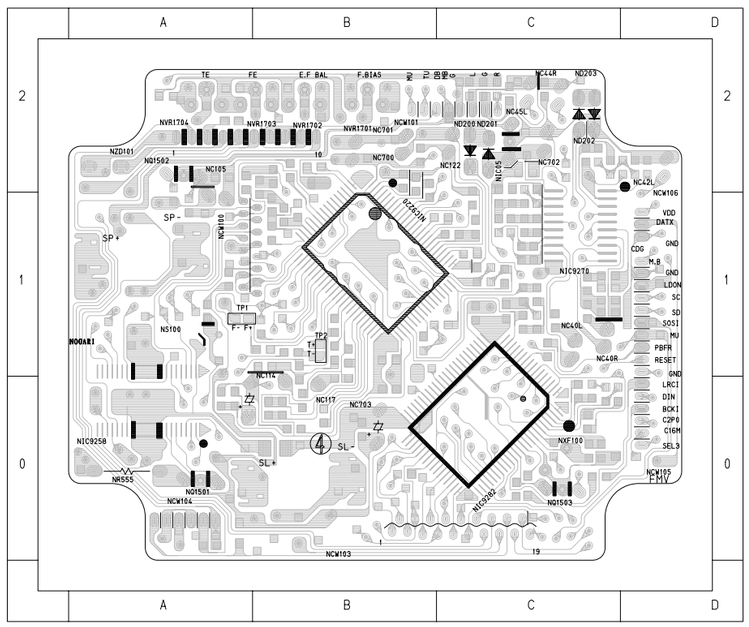
*** IC&WAFER ***

NCW101 (C2)
NCW104 (A0)
NCW105 (D1)
NCW106 (D1)

*** CHIP ***

103 (C0)
103 (B0)
NC100 (B1)
NC1000 (C1)
NC1001 (C1)
NC101 (B2)
NC102 (B2)
NC103 (B2)
NC104 (A2)
NC107 (B1)
NC108 (B1)
NC109 (A2)
NC110 (A2)
NC111 (B1)
NC112 (B1)
NC113 (B1)
NC115 (A0)
NC116 (B1)
NC118 (B0)
NC119 (C1)
NC120 (C1)
NC121 (C1)
NC124 (C1)
NC125 (C1)
NC190 (B2)
NC200 (C0)
NC2000 (B1)
NC201 (C0)
NC202 (C0)
NC203 (C0)
NC204 (C1)
NC205 (C1)
NC400 (C2)
NC41L (C1)
NC41R (C1)
NC42R (C2)
NC43L (C1)
NC43R (D2)
NC44L (C1)
NC45R (C2)
NC46L (C2)
NC500 (A2)
NC600 (D1)
NC601 (B1)
NC602 (C2)
NC603 (A0)
NIC9220 (B1)
NIC9258 (A0)
NIC9270 (C1)
NIC9282 (C0)
NL100 (B0)
NR100 (B1)
NR101 (A1)
NR102 (A1)
NR103 (B1)
NR104 (B1)
NR105 (B0)
NR106 (B0)
NR107 (B0)
NR108 (B0)
NR109 (B1)
NR110 (B0)
NR111 (A0)
NR112 (B0)
NR113 (C1)
NR114 (B1)
NR115 (C1)
NR116 (B2)
NR117 (B2)
NR118 (A2)
NR119 (C1)
NR190 (B2)
NR191 (B1)
NR200 (C0)
NR201 (C0)
NR202 (C0)
NR203 (C1)
NR204 (C1)
NR205 (C1)
NR40L (C1)
NR40R (C1)
NR41L (C1)
NR41R (C1)
NR42L (C1)
NR42R (C1)
NR43L (C1)
NR43R (C1)
NR44L (C1)
NR44R (C2)
NR45L (C1)
NR45R (C2)
NR46L (C1)
NR46R (D2)
NR47L (C2)
NR47R (C2)
NR601 (C0)
NR602 (C0)
NR603 (C0)
NR604 (C1)
NR605 (A1)
NR606 (B2)
NR607 (D0)
NR608 (C1)
NR609 (C2)
NR610 (A1)
NR611 (D2)
NR612 (B0)
NR613 (A0)
NRD (C1)

## 10-4-2 Bottom View




*** RESISTOR ***

NR555 (A0)

*** CONDENSER ***

NC105 (A1)
NC114 (A0)
NC117 (B0)
NC122 (C2)
NC40L (C1)
NC40R (C1)
NC42L (D2)
NC44R (C2)
NC45L (C2)
NC700 (B2)
NC701 (B2)
NC702 (C2)
NC703 (B0)

*** DIODE ***

ND200 (C2)
ND201 (C2)
ND202 (C2)
ND203 (C2)
NZD101 (A2)

*** TR ***

NIC05 (C2)
NQ1501 (A0)
NQ1502 (A2)
NQ1503 (C0)

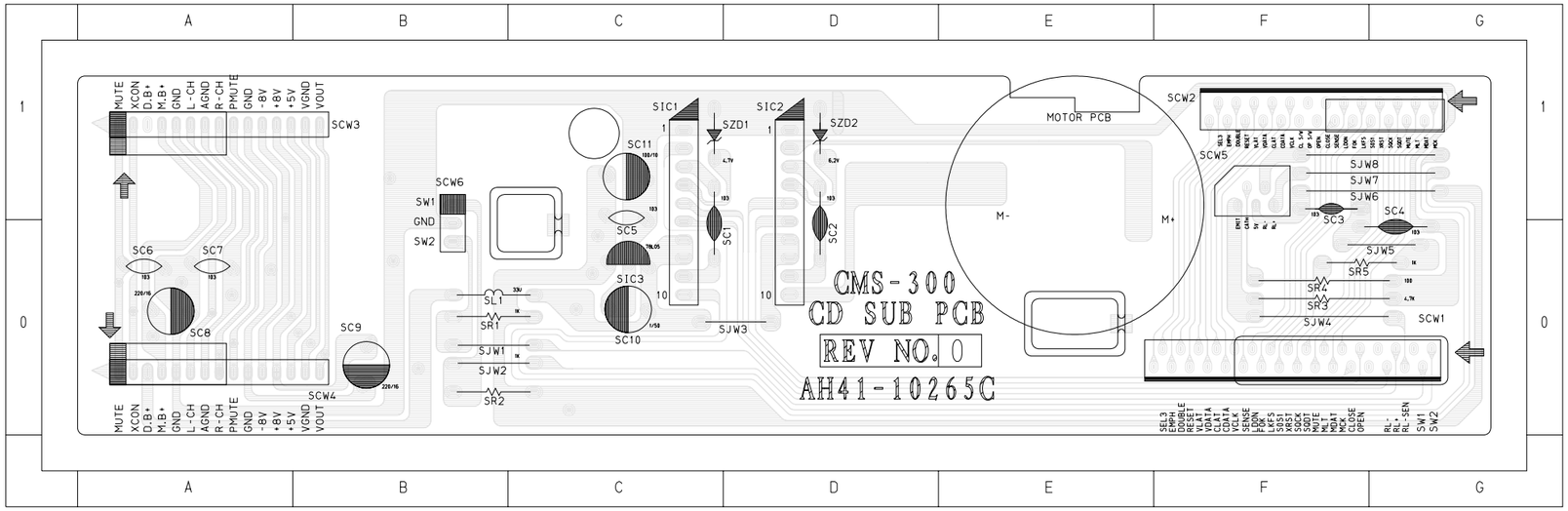
*** IC&WAFER ***

NCW101 (C2)
NCW104 (A0)
NCW105 (D1)
NCW106 (D1)

*** CHIP ***

103 (C0)
103 (B0)
NC100 (B1)
NC1000 (C1)
NC1001 (C1)
NC101 (B2)
NC102 (B2)
NC103 (B2)
NC104 (A2)
NC107 (B1)
NC108 (B1)
NC109 (A2)
NC110 (A2)
NC111 (B1)
NC112 (B1)
NC113 (B1)
NC115 (A0)
NC116 (B1)
NC118 (B0)
NC119 (C1)
NC120 (C1)
NC121 (C1)
NC124 (C1)
NC125 (C1)
NC190 (B2)
NC200 (C0)
NC2000 (B1)
NC201 (C0)
NC202 (C0)
NC203 (C0)
NC204 (C1)
NC205 (C1)
NC400 (C2)
NC41L (C1)
NC41R (C1)
NC42R (C2)
NC43L (C1)
NC43R (D2)
NC44L (C1)
NC45R (C2)
NC46L (C2)
NC500 (A2)
NC600 (D1)
NC601 (B1)
NC602 (C2)
NC603 (A0)
NIC9220 (B1)
NIC9258 (A0)
NIC9270 (C1)
NIC9282 (C0)
NL100 (B0)
NR100 (B1)
NR101 (A1)
NR102 (A1)
NR103 (B1)
NR104 (B1)
NR105 (B0)
NR106 (B0)
NR107 (B0)
NR108 (B0)
NR109 (B1)
NR110 (B0)
NR111 (A0)
NR112 (B0)
NR113 (C1)
NR114 (B1)
NR115 (C1)
NR116 (B2)
NR117 (B2)
NR118 (A2)
NR119 (C1)
NR190 (B2)
NR191 (B1)
NR200 (C0)
NR201 (C0)
NR202 (C0)
NR203 (C1)
NR204 (C1)
NR205 (C1)
NR40L (C1)
NR40R (C1)
NR41L (C1)
NR41R (C1)
NR42L (C1)
NR42R (C1)
NR43L (C1)
NR43R (C1)
NR44L (C1)
NR44R (C2)
NR45L (C1)
NR45R (C2)
NR46L (C1)
NR46R (D2)
NR47L (C2)
NR47R (C2)
NR601 (C0)
NR602 (C0)
NR603 (C0)
NR604 (C1)
NR605 (A1)
NR606 (B2)
NR607 (D0)
NR608 (C1)
NR609 (C2)
NR610 (A1)
NR611 (D2)
NR612 (B0)
NR613 (A0)
NRD (C1)

## 10-4-3 SUB




*** RESISTOR ***

SR1 (B0)
SR2 (B0)
SR3 (F0)
SR4 (F0)
SR5 (F0)

*** CONDENSER ***

SC1 (C0)
SC10 (C0)
SC11 (C1)
SC2 (D0)
SC3 (F1)
SC4 (F0)
SC5 (C1)
SC6 (A0)
SC7 (A0)
SC8 (A0)
SC9 (B0)

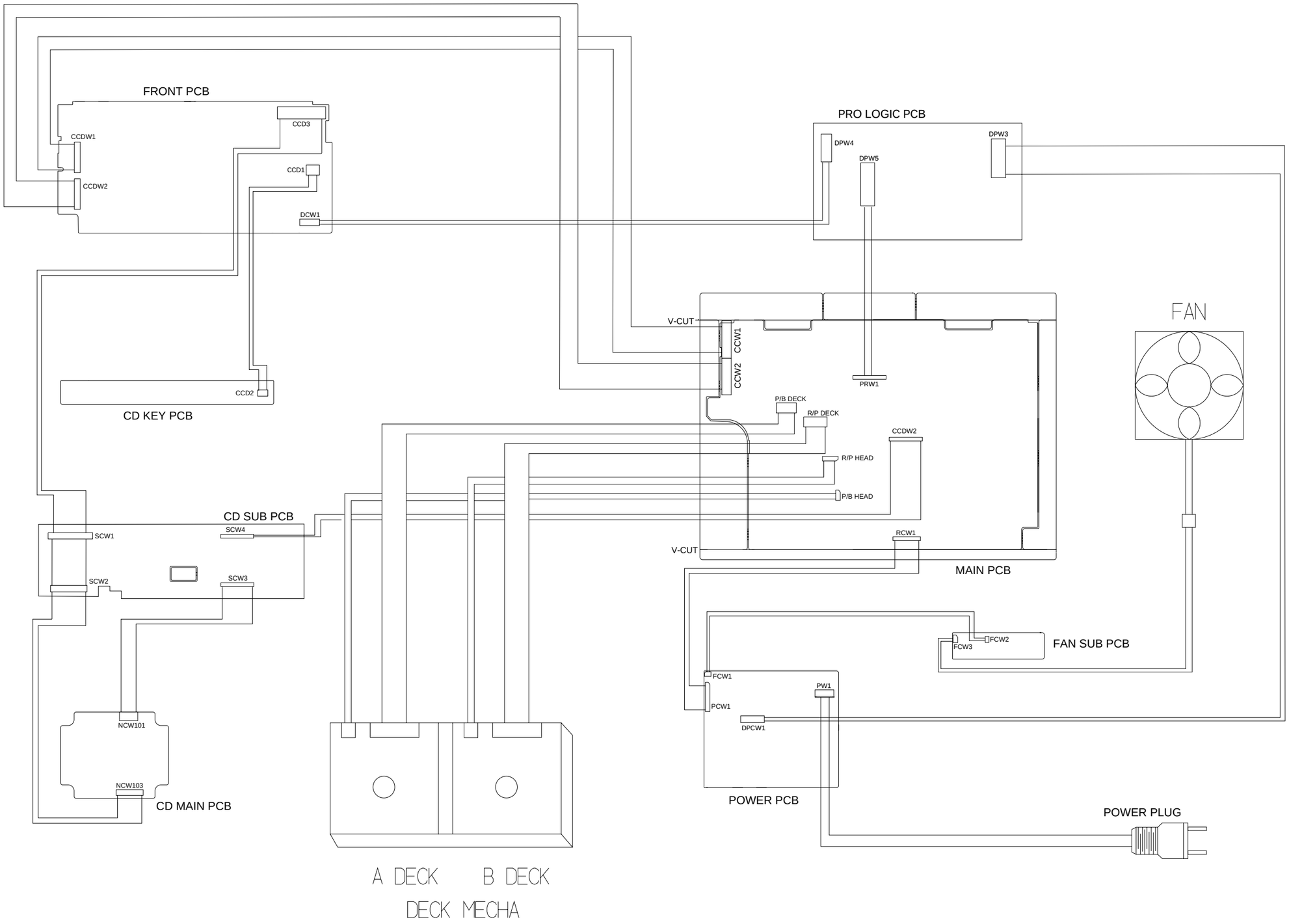
*** DIODE ***

SZD1 (C1)
SZD2 (D1)

*** TR ***

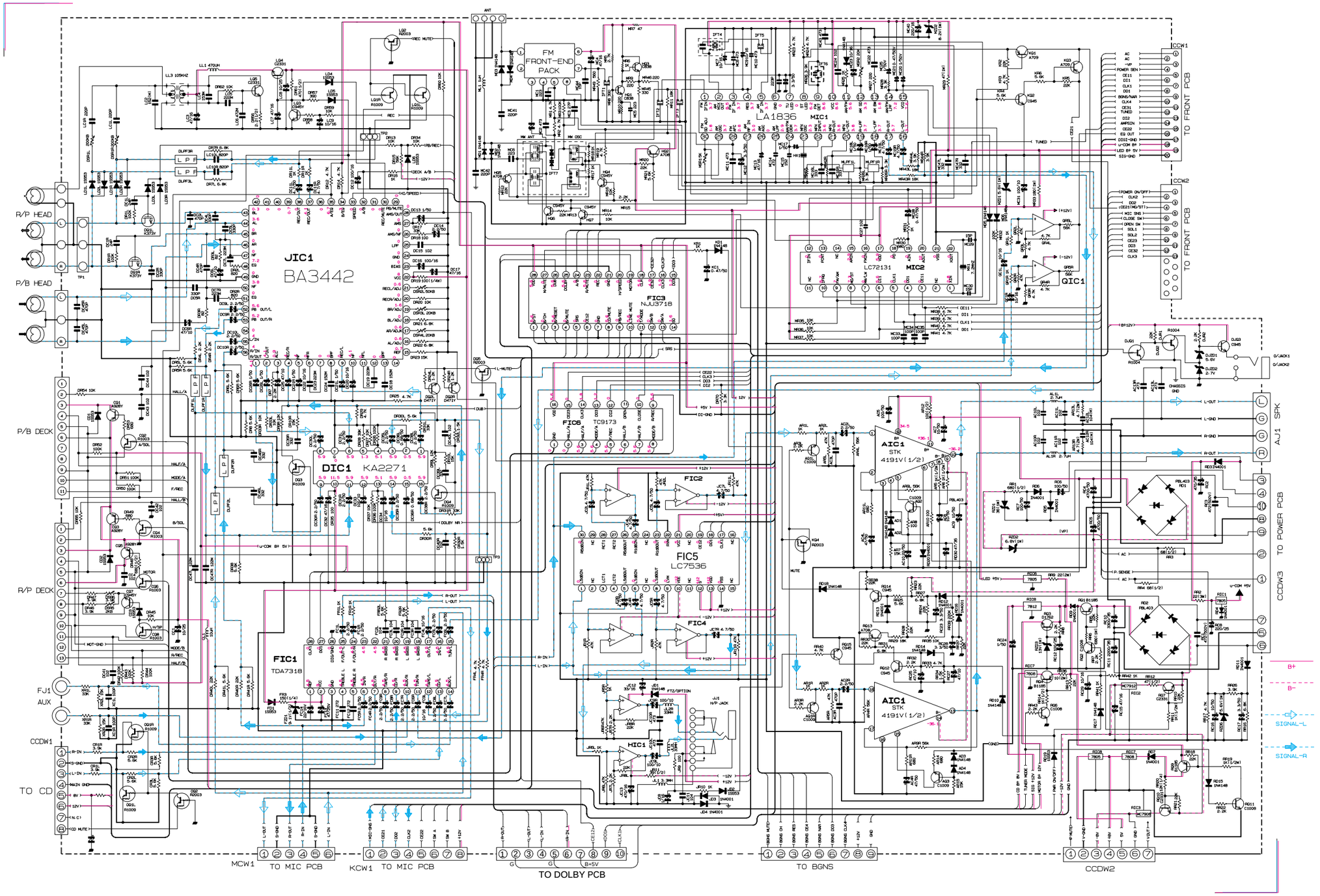
SIC3 (C0)

# 11. Wiring Diagram

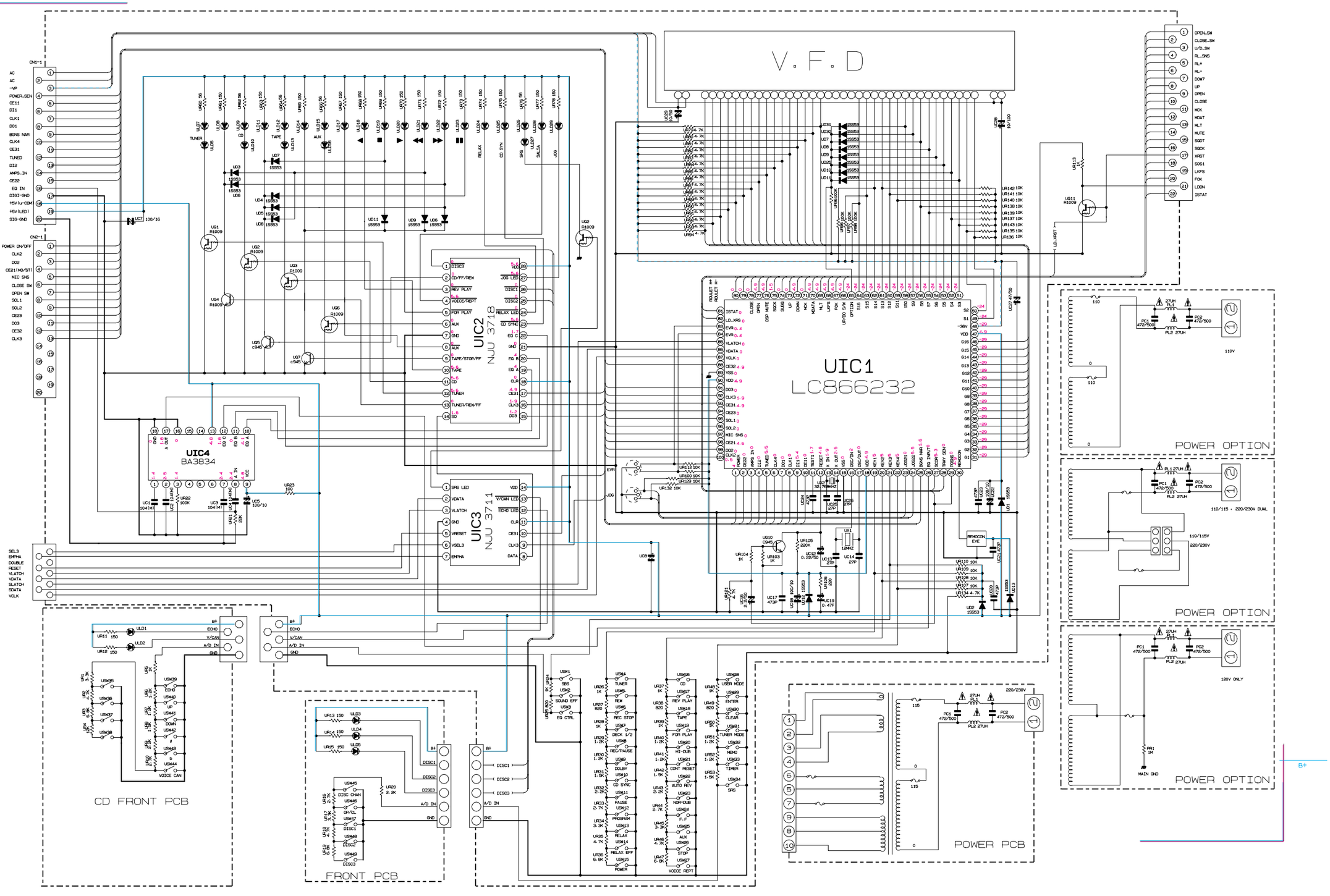


# 12. Schematic Diagrams

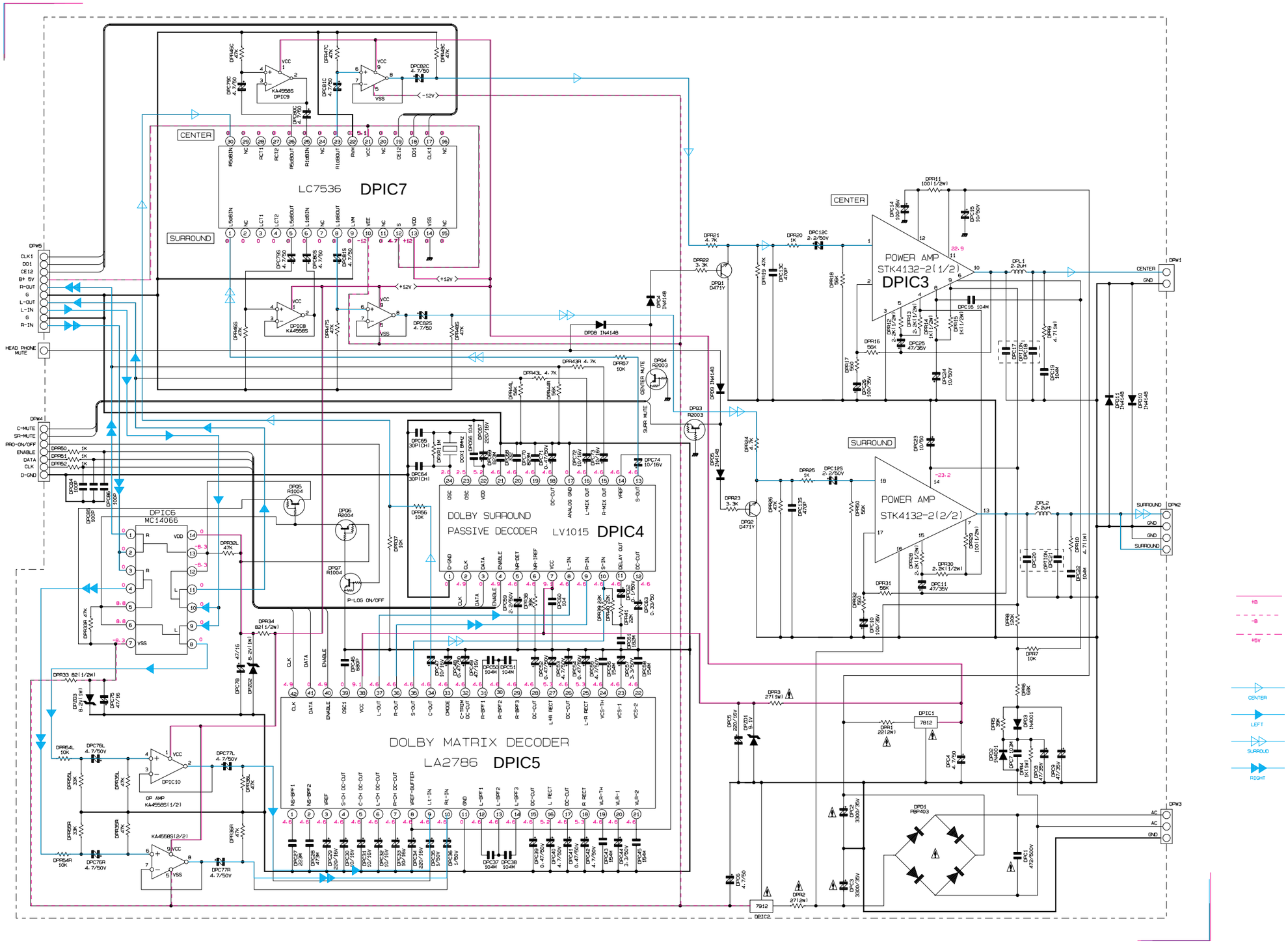
## 12-1 Main



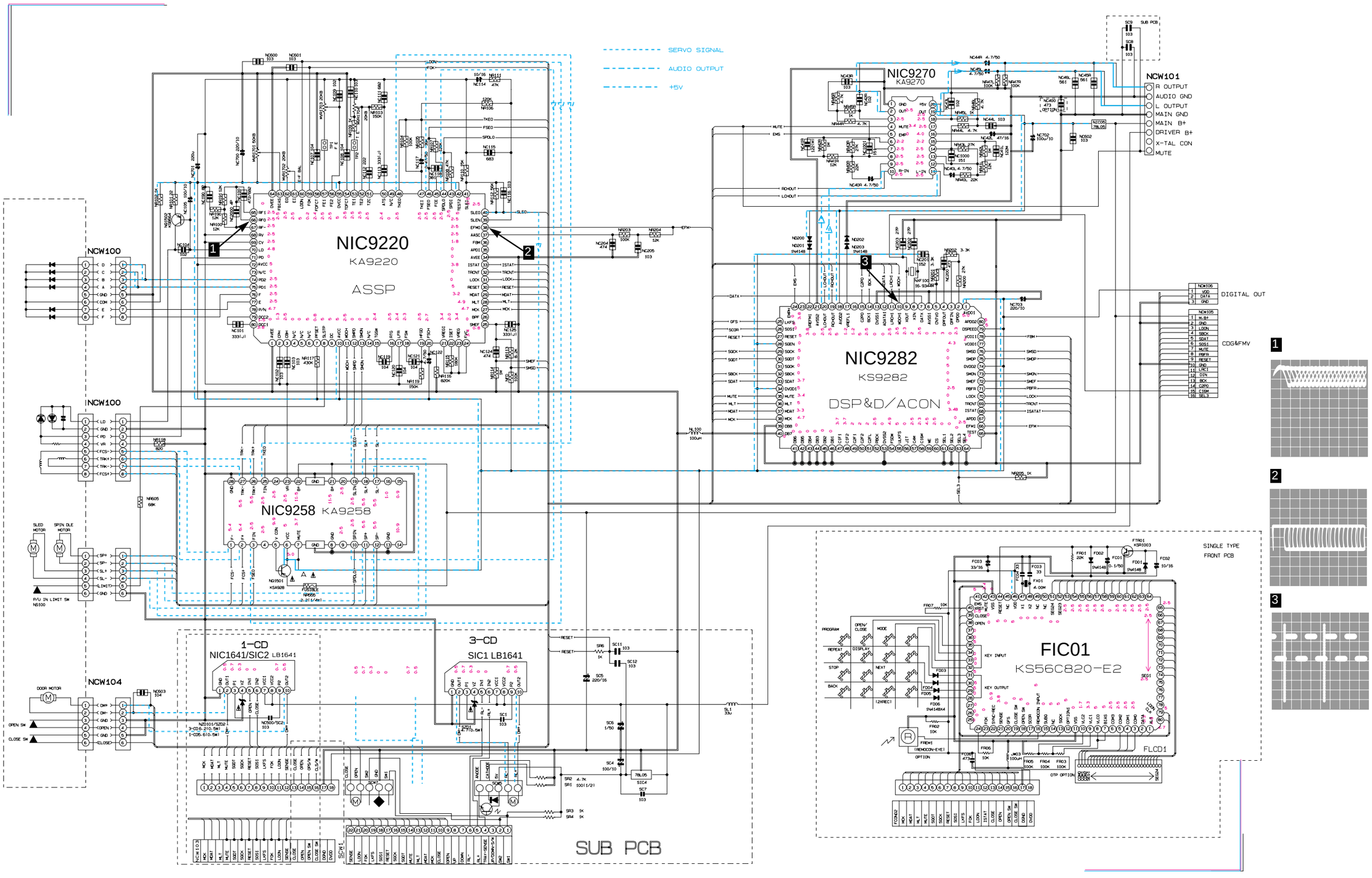
# 12-2 Front


V. F. D
UIC1
LC866232
UIC2
NJU 3711
UIC3
NJU 3711
UIC4
BA3834
CD FRONT PCB
FRONT PCB
POWER PCB
POWER OPTION
POWER OPTION
POWER OPTION
110/115 · 220/230V DUAL
110/115V
220/230V
120V ONLY
B+

# 12-3 Pro-Logic



# 12-4 CD


SERVO SIGNAL
AUDIO OUTPUT
+5V
NIC9220
KA9220
ASSP
NIC9282
KS9282
DSP&D/ACON
NIC9258 KA9258
NIC9270
KA9270
FIC01
KS56C820-E2
SUB PCB
1-CD
NIC1641/SIC2 LB1641
3-CD
SIC1 LB1641
NCW100
NCW101
NCW104
NCW105
NCW106
R OUTPUT
AUDIO GND
L OUTPUT
MAIN GND
MAIN B+
DRIVER B+
X-TAL CON
MUTE
DIGITAL OUT
CDG&FMV
SUB PCB
SINGLE TYPE
FRONT PCB
SLED MOTOR
SPIN DLE MOTOR
DOOR MOTOR
OPEN SW
CLOSE SW
PU IN LIMIT SW
NS100
1
2
3